TOWN OF HILLSVILLE

P.O. Box 545
410 N. Main St.
Hillsville, Virginia 24343

Website: www.townofhillsville.com

E-mail: hillsville@tcia.net

Telephone: 276-728-2128

Fax: 276-728-9371

Received

APR 29 2011

DEQ-SWRO

April 29, 2011

Mr. Fred M. Wyatt

Environmental Engineer Senior

Department of Environmental Quality

P.O. Box 1688

355 Deadmore Street

Abingdon, VA 24212-1688

RE: VPDES Permit Reissuance Application for the Hillsville Wastewater Treatment Plant, VPDES Permit No. VA0089443

Dear Mr. Wyatt

Attached are the corrected pages and Town Manager's signature required for our VPDES Permit Reissuance Application. I will also e-mail you a copy including the corrected information. If anything else is needed please let me know. Thank you for all of your assistance.

Sincerely,

Daniel Mayes

Darrick Mayes

Utilities Director

Wyatt, Frederick (DEQ)

From:

TOWN OF HILLSVILLE [hillsvilleutilities@centurylink.net]

Sent:

Thursday, April 28, 2011 2:50 PM

To:

Wyatt, Frederick (DEQ)

Subject:

VPDES Permit No. VA0089443

Attachments:

FACILITY NAME AND PERMIT NUMBER.docx; sludgeapp.doc

Good afternoon Mr. Wyatt. Attached are the corrected permit application forms for the Hillsville Wastewater Treatment Plant, VPDES Permit NO. VA0089443. I am unable to e-mail page 2 of the Virginia DEQ No Exposure Certification for Exclusion from VPDES Storm Water Permitting form, a corrected hard copy however is being mailed. If anything further is needed please let me know and thank you for all of your help.

DARRICK MAYES
TOWN OF HILLSVILLE
UTILITIES DIRECTOR
hillsvilleutilities@centurylink.net

phone:276-728-5533 fax:276-728-9923

Received

VPDES PERMIT APPLICATION ADDENDUM

1.	Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.
2.	Is this facility located within city or town boundaries?
3.	Provide the tax map parcel number for the land where the discharge is located. 52 (A) 7
4.	For the facility to be covered by this permit, how many acres will be disturbed during the next fine years due to new construction activities?
5.	What is the design average effluent flow of this facility?MGD For industrial facilities, provide the max. 30-day average production level, include units:
:	In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Y/\infty\) If "Yes", please identify the other flow tiers (in MGD) or production levels:
	Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?
6.	Nature of operations generating wastewater: Domestic and non-domestic connections.
	85% of flow from domestic connections/sources Number of private residences to be served by the treatment works: 2849
	15 % of flow from non-domestic connections/sources
7.	Mode of discharge:ContinuousIntermittentSeasonal Describe frequency and duration of intermittent or seasonal discharges:
3.	Identify the characteristics of the receiving stream at the point just above the facility's discharge point:
€.	Approval Date(s): O & M Manual //O/O Sludge/Solids Management Plan //O/O

Have there been any changes in your operations or procedures since the above approval dates? Y/N

Received

JAN 2 0 2011

VIRGINIA DEQ NO EXPOSURE CERTIFICATION FOR EXCLUSION FROM VPDES STORM WATER PERMITTING

DEO-SWRO

Submission of this **No Exposure Certification** constitutes notice that the entity identified below does not require permit authorization for its storm water discharges associated with industrial activity under the VPDES Permit Program due to the existence of a condition of **No Exposure**.

A condition of **No Exposure** exists at an industrial facility when all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. A storm resistant shelter is not required for the following industrial materials and activities:

- drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. "Sealed" means banded or otherwise secured and without operational taps or valves;
- adequately maintained vehicles used in material handling; and
- final products, other than products that would be mobilized in storm water discharges (e.g., rock salt).

A No Exposure Certification must be provided for each facility qualifying for the No Exposure exclusion. In addition, the exclusion from VPDES permitting is available on a facility-wide basis only, not for individual outfalls. If any industrial activities or materials are or will be exposed to precipitation, the facility is not eligible for the No Exposure exclusion.

By signing and submitting this No Exposure Certification form, the entity below is certifying that a condition of No Exposure exists at its facility or site, and is obligated to comply with the terms and conditions at 9 VAC 25-31-120 E (the VPDES Permit Regulation).

	Please Type or Print All Information. ALL INFORMATION ON THIS FORM MUST BE PROVIDED.
1.	Facility Owner Information
	Name: Todd Jennings
	Mailing Address: 450 Cross Creek Road
	City: Hillsuille State: VA Zip: 24343 Phone: 276-728-553
2.	Facility/Site Location Information
	Facility Name: Town of Hillsville Wastewater Plant
	Address: 450 Cross Creek Road
	City: Hillsville State: VA Zip: 24343
	Latitude: 36°47′13′′ Longitude: 080° 44′52′′
3.	Was the facility or site previously covered under a VPDES storm water permit? Yes No W
	If "Yes", enter the VPDES permit number:
1.	SIC/Activity Codes: Primary: 4952 Secondary (if applicable): N/A
5.	Total size of facility/site associated with industrial activity: = 4
3.	Have you paved or roofed over a formerly exposed pervious area in order to qualify for the No Exposure exclusion? Yes \square No \square
	If "Yes", please indicate approximately how much area was paved or roofed. Completing this question does not disqualify you for the No Exposure exclusion. However, DEQ may use this information in considering whether storm water discharges from your site are likely to have an adverse impact on water quality, in which case you could be required to obtain permit coverage.
	Less than one acre One to five acres More than five acres

DEQ-WATER FORM SW-NEC (9/00)

(Corrected 4/06)

A Garage

Page 1 of 3

Are any of the following materials or activities exposed to precipitation, now or in the foreseeable future? (Please check either "Yes" or "No" in the appropriate box.) If you answer "Yes" to any of these questions (1) through (11), you are not eligible for the No Exposure exclusion. Yes No ₩. Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to storm water Materials or residuals on the ground or in storm water inlets from spill/leaks 2. 3. Materials or products from past industrial activity 4 Material handling equipment (except adequately maintained vehicles) \square Materials or products during loading/unloading or transporting activities 5 Materials or products stored outdoors (except final products intended for outside use [e.g., new cars] where exposure to storm water does not result in the discharge of pollutants) 7. Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers **□** Materials or products handled/stored on roads or railways owned or maintained by the discharger **⊠**Y Waste material (except waste in covered, non-leaking containers [e.g., dumpsters]) Application or disposal of process wastewater (unless otherwise permitted) 10. **□** Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the storm water outflow 8. Certification Statement I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of no exposure and obtaining an exclusion from VPDES storm water permitting; and that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility identified in this document (except as allowed under 9 VAC 25-31-120 E 2). I understand that I am obligated to submit a No Exposure Certification form once every five years to the Department of Environmental Quality and, if requested, to the operator of the local MS4 into which this facility discharges (where applicable). I understand that I must allow the Department, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under a VPDES permit prior to any point source discharge of storm water associated with industrial activity from the facility. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Print Name: Print Title: Signature: Date: For Department of Environmental Quality Use Only

Accepted/Not Accepted by: _____

7. Exposure Checklist

Date :_

Form Approved 1/14/99 OMB Number 2040-0086

FORM

2A NPDES

NPDES FORM 2A APPLICATION OVERVIEW

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

- A. Basic Application Information for all Applicants. All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. Additional Application Information for Applicants with a Design Flow ≥ 0.1 mgd. All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. Certification. All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

- D. Expanded Effluent Testing Data. A treatment works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
 - Has a design flow rate greater than or equal to 1mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - 3. Is otherwise required by the permitting authority to provide the information.
- E. Toxicity Testing Data. A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd.
 - 2. Is required to have a pretreatment program (or has one in place), or
 - Is otherwise required by the permitting authority to submit results of toxicity testing.
- F. Industrial User Discharges and RCRA/CERCLA Wastes. A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
 - 1. All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
 - 2. Any other industrial user that:
 - Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
 - b. Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
 - c. Is designated as an SIU by the control authority.
- G. Combined Sewer Systems. A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

Form Approved 1/14/99 OMB Number 2040-0086 Hillsville Wastewater Treatment Plant VA0089443 BASIC APPLICATION INFORMATION PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS: All treatment works must complete questions A.1 through A.8 of this Basic Application Information Packet. A.1. Facility Information. **Hillsville Wastewater Treatment Plant Facility Name** Mailing Address P.O. Box 545 Hillsville, VA 24343 Contact Person Darrick Mayes **Utilities Director** Title (276) 728-5533 Telephone Number 450 Cross Creek Road Facility Address Hillsville, VA 24343 (not P.O. Box) Applicant Information. If the applicant is different from the above, provide the following: A.2. Applicant Name Mailing Address Contact Person Title Is the applicant the owner or operator (or both) of the treatment works? - PP19owner operator Indicate whether correspondence regarding this permit should be directed to the facility or the applicant. applicant ☐ facility Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to A.3. the treatment works (include state-issued permits). **PSD NPDES** VA0089443 UIC Other **RCRA** Other Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.). Name Population Served Type of Collection System Ownership municipal Hillsville separate

Total population served 2849

2'67' 3)

Hillsville Wastewater Treatment Plant VA0089443

A.5.	Indian	Country.										
	a.	Is the treatment works located in Inc	lian Country?									
		☐ Yes No										
	b.	Does the treatment works discharge flows through) Indian Country?	to a receiving water that is eit	ther in Indian Country or	that is up	ostream from (and eventually						
		☐ Yes										
A.6.	average	ndicate the design flow rate of the trea daily flow rate and maximum daily flov ith the 12 th month of "this year" occurr	w rate for each of the last three	e years. Each year's da	ta must b	e based on a 12-month time						
	a.	Design flow rate 1.25 mgd										
			Two Years Ago	<u>Last Year</u>		This Year						
	b.	Annual average daily flow rate	.431	.463		.379						
	C.	Maximum daily flow rate	.964	1.316		1.234						
A.7.		on System. Indicate the type(s) of co ion (by miles) of each.	llection system(s) used by the	treatment plant. Check	all that a	pply. Also estimate the percent						
	⊠ Sepa	arate sanitary sewer			<u>100</u>	%						
	☐ Com	bined storm and sanitary sewer			0	%						
A.8.	Dischar	ges and Other Disposal Methods.										
en j	a.	Does the treatment works discharge If yes, list how many of each of the form i. Discharges of treated efflutions.	ollowing types of discharge po	ints the treatment works	uses:	No						
-19	•	ii. Discharges of untreated or	partially treated effluent	ar in the transfer as the second	0	in the						
		iii. Combined sewer overflow	points	전 [11] (11] 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	0							
		iv. Constructed emergency or	verflows (prior to the headwork	s)	0							
		v. Other			0							
	b.	Does the treatment works discharge that do not have outlets for discharge		ther surface impoundme	nts	⊠ No						
		If yes, provide the following for each	surface impoundment:									
		Location:				· · · · · · · · · · · · · · · · · · ·						
		Annual average daily volume dischar	ge to surface impoundment(s)			mgd						
		Is discharge	or intermittent?									
	c.	Does the treatment works land-apply	treated wastewater?		☐ Yes	⊠ No						
		If yes, provide the following for each	land application site:									
		Location:										
		Number of acres:		· · · · · · · · · · · · · · · · · · ·								
		Annual average daily volume applied	to site:	m	gd							
		Is land application	us or intermittent?									
	d.	Does the treatment works discharge treatment works?	or transport treated or untreate	ed wastewater to anothe	r Yes	⊠ No						

Hillsville Wastewater Treatment Plant VA0089443

	If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).
	N/A
	If transport is by a party other than the applicant, provide:
•	Transporter Name N/A
	Mailing Address
	Contact Person
	Title
	Telephone Number ()
	For each treatment works that receives this discharge, provide the following:
	Name N/A
	Mailing Address
	Contact Person
	Title
	Telephone Number ()
	If known, provide the NPDES permit number of the treatment works that receives this discharge
ingilita Tigali inga Malaysiya	Provide the average daily flow rate from the treatment works into the receiving facility: mgd
e.	Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8. through A.8.d above (e.g., underground percolation, well injection):
,	If yes, provide the following for each disposal method:
	Description of method (including location and size of site(s) if applicable):
	Annual daily volume disposed by this method:
	Is disposal through this method

Hillsville Wastewater Treatment Plant VA0089443

Form Approved 1/14/99 OMB Number 2040-0086

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B. "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

D	Descrip	ption of Outfall.			
а	ı .	Outfall number	001		
b		Location	Hillsville		24343
			(City or town, if applica	able)	(Zip Code)
			Carroll (County)	· · · · · · · · · · · · · · · · · · ·	VA (State)
			36 47'13"		80 44' 52"
		•	(Lattitutde)		(Longitude)
C.		Distance from shore (if	applicable)	N/A	ft.
d.		Depth below surface (if	fapplicable)	. <u>N/A</u>	ft.
e.		Average daily flow rate		N/A	mgd
f.		Does this outfall have edischarge?	either an intermittent or a p		lo (go to A.9.g.)
4.2	r Jig	If yes, provide the follow	wing information:		. d
. (,		Number f times per yea	ar discharge occurs:		
	el e George	Average duration of each	ch discharge:	and the second s	
	Yar	Average flow per discha	arge:		mgd se
		Months in which discha	irge occurs:		·
g.		Is outfall equipped with	a diffuser?	☐ Yes ⊠ N	0
		otion of Receiving Wate			
a.		Name of receiving water	er <u>Little Reed</u>	Island Creek	
b.		Name of watershed (if I	(nown) <u>VA5-N15R</u>		
		United States Soil Cons	servation Service 14-digit v	watershed code (if known):	N/A
C.		Name of State Manage	ment/River Basin (if knowi	n): New River	
	•	United States Geologic	al Survey 8-digit hydrologi	c cataloging unit code (if know	wn): 05050001
d.		,	iving stream (if applicable)		cfs
e.		Total hardness of receiv	ving stream at critical low f	flow (if applicable): N/A	mg/l of CaCO₃
	•		-		
				•	

Hillsville Wastewater Treatment Plant VA0089443

A.11.	Descri	ption of	Treatmen	:						
	a.	What I	evels of tre	atment are p	provided? Ch	eck all tha	it apply.			
		⊠ Pr	imary	\boxtimes	Secondary					
Outfall n OH (Minitor H) (Max Flow Rate Femperate CONVERIENCE BIOCHEM DEMAND		☐ Ac	lvanced		Other. De	scribe:				
	b.	Indicat	e the follow	ing removal	rates (as ap	plicable):				
				•	ign CBOD5 r	•	9	5		%
a. When the second seco		n SS remov	_			9	5		- %	
		•	n P remova					I/A		%
			n N remova		•		_	00		%
		Other					_	I/A		%
	C.		vpe of disir	fection is us	 ed for the effl	uent from			raries by season, p	•
•	.		iolet light						,,	
-					n is dechlorina	ation used	for this out	fall?	☐ Yes	
	d								⊠ Yes	□ No
	-									
A.12 Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.										
	PARAN	IETER		MAXIMUM	DAILY VAL	_UE		AVERAGI	DAILY VALUE	
				Value	Unit	S	Value	Uni	ts Numb	er of Samples
pH (Min	imum)	_		7.0	s.u.		il.		Bay the in	President Alberta
pH (Max	kimum)			7.5	s.u.				<u>1. 189</u> . 1.1.	
			1	1.149	MGE	<u> </u>	.428	MG	D	31
				10	С		6	С		31
Temper			report a mi	23	C a maximum d	aily value	21	С		31
	CASTA THE THE P.	3 (2.3), 9), 19 (.2) (1	Programme and seven	MAXIM	JM DAILY HARGE	e with the new years of the same	VERAGE DISCHAI	1910 July 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ANALYTICAL METHOD	ML/MDL
				Conc.	Units	Conc.	Units	Number of Samples		
CONVE	NTION	AL ANI	NON CO	NVENTIO	NAL COMP	OUNDS				
			BOD5	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			CBOD5	7	mg/L	<5	mg/L	13	SM5210B	5mg/L
	COLIFOR			156	N/CML	18.2	N/CML	13	EPA 1603	1N/CML
TOTAL S	USPENDI	ED SOLIE	OS (TSS)	33	mg/L	11.2	mg/L	13	SM2540D	1 mg/L

END OF PART A. REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

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77.3

Hillsville Wastewater Treatment Plant VA0089443

				ONID IVAINDEL 2040-000
ВА	SIC	APPLICATION IN	FORMATION	
PAF	RT B		PPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN AL TO 0.1 MGD (100,000 gallons per day).	N FLOW GREATER
All a	pplic	ants with a design flow	w rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to	Part C (Certification).
B.1.		ow and Infiltration. Esti /or infiltration.	imate the average number of gallons per day that flow into the treatme	ent works from inflow
	can	not measure	gpd	
	Brie	fly explain any steps u	nderway or planned to minimize inflow and infiltration.	
	see	above	<u> </u>	
B.2.	bou		n to this application a topographic map of the area extending at least one mist show the outline of the facility and the following information. (You may sue entire area.)	
	a.	The area surrounding th	ne treatment plant, including all unit processes.	
	b.	The major pipes or othe treated wastewater is di	er structures through which wastewater enters the treatment works and the pipes or o ischarged from the treatment plant. Include outfalls from bypass piping, if applicable.	ther structures through which
	C.	Each well where wastev	water from the treatment plant is injected underground.	
	d.		rface water bodies, and drinking water wells that are: 1) within $\frac{1}{2}$ mile of the property public record or otherwise known to the applicant.	/ boundaries of the treatment
31 + 2	e.	Any areas where the se	wage sludge produced by the treatment works is stored, treated, or disposed.	
. (2) k	f.		eceives waste that is classified as hazardous under the Resource Conservation and F w on the map where the hazardous waste enters the treatment works and where it is	
B.3.	back chlor	up power sources or redu ination and dechlorination	r Schematic. Provide a diagram showing the processes of the treatment plant, includancy in the system. Also provide a water balance showing all treatment units, include. The water balance must show daily average flow rates at influent and discharge punits. Include a brief narrative description of the diagram.	luding disinfection (e.g.,
B . 4.	Oper	ration/Maintenance Perfor	med by Contractor(s).	
			nance aspects (related to wastewater treatment and effluent quality) of the treatment res No	works the responsibility of a
٠		s, list the name, address, t s if necessary).	telephone number, and status of each contractor and describe the contractor's respo	nsibilities (attach additional
	Nam	e:		
	Maili	ng Address:		
	Telep	phone Number:	()	
	Resp	onsibilities of Contractor:	4	
B.5.	unco treatr	mpleted plans for improve	s and Schedules of Implementation. Provide information on any uncompleted ements that will affect the wastewater treatment, effluent quality, or design capacity of ifferent implementation schedules or is planning several improvements, submit separation B.6.)	f the treatment works. If the
	a.	List the outfall number (a	assigned in question A.9) for each outfall that is covered by this implementation sche	dule.
		N/A		
	b.	Indicate whether the plan	nned improvements or implementation schedule are required by local, State, or Fede	ral agencies.
		Yes No	0	

Hillsville Wastewater Treatment Plant VA0089443

Form Approved 1/14/99 OMB Number 2040-0086

C.	If the answer to B.5.b is "Yes," briefly	/ describe, including new maximum dail	y inflow rate (if applicable).
	N/A		
d.		ed independently of local, State, or Fed	completion for the implementation steps listed below, as eral agencies, indicate planned or actual completion dates, as
		Schedule	Actual Completion
	Implementation Stage	MM/DD/YYYY	MM/DD/YYYY
	- Begin Construction		
	- End Construction		
	- Begin Discharge		
	- Attain Operational Level		
e.	Have appropriate permits/clearances	concerning other Federal/State require	ments been obtained?
	Describe briefly: N/A		
B.6. El	FFLUENT TESTING DATA (GREA	TER THAN 0.1 MGD ONLY).	
Ap fol	oplicants that discharge to waters of the llowing listed parameters and those requ	US must provide effluent testing data four irred by the permitting authority for each	r the following parameters. Provide effluent testing for the outfall through which effluent is discharged. Do not include must be based on data collected through analysis conducted

using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum effluent testing data must be based on at

least three pollutant scans, preferably represent several seasons, and must be no more than four and on-half years old.

Outfall Number: 001

1 1 1000 1		,	Contracts of the second section of the second			250 15 1505	
The second secon	31 (31) (31) (31) (31) (31) (31) (31)	A	CARROLL STORY CONTRACT STAN	and the contract of the contra	ANALYTICAL METHOD	ML/MDL	
Conc.	Units	Conc.	Units	Number of Samples			
NVENTIO	NAL COMP	OUNDS			, , , , , , , , , , , , , , , , , , , ,		
<10	mg/L	<10	mg/L	15	SM4500- NH3F	10 mg/L	
N/A							
12.7	mg/L	9.5	mg/L	31	SM4500-OG	.1 mg/L	
.84	mg/L	.68	mg/L	3	SM18 4500- NorgC	.1 mg/L	
12.14	mg/L	8.4	mg/L	3	SM18 4500- NO3E	.1 mg/L	
<1.0	mg/L	<1.0	mg/L	3	EPA 1644 A	1.0 mg/L	
.36	mg/L	.22	mg/L	3	SM18 4500- PE	.1 mg/L	
558	mg/L	459.3	mg/L	3	SM18 2540C	.1 mg/L	
N/A							
	MAXIMU DISC Conc. NVENTION <10 N/A 12.7 .84 12.14 <1.0 .36 558	MAXIMUM DAILY DISCHARGE Conc. Units NVENTIONAL COMP <10 mg/L N/A 12.7 mg/L .84 mg/L 12.14 mg/L <1.0 mg/L .36 mg/L 558 mg/L	MAXIMUM DAILY DISCHARGE A Conc. Units Conc. NVENTIONAL COMPOUNDS <10	MAXIMUM DAILY DISCHARGE DISCHARGE AVERAGE DISCHA Conc. Units Conc. Units NVENTIONAL COMPOUNDS <10 mg/L	MAXIMUM DAILY DISCHARGE AVERAGE DAILY DISCHARGE Conc. Units Number of Samples NVENTIONAL COMPOUNDS <10	MAXIMUM DAILY DISCHARGE AVERAGE DAILY DISCHARGE ANALYTICAL METHOD Conc. Units Conc. Units Number of Samples NVENTIONAL COMPOUNDS VENTIONAL COMPOUNDS SM4500-NH3F <10	

END OF PART B.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM

2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:	
Hillsville WWTP VA0089443	Form Approved 1/14/99 OMB Number 2040-0086
BASIC APPLICATION INFORMATION	
PART C. CERTIFICATION	
All applicants must complete the Certification Section. Refer to instructions to applicants must complete all applicable sections of Form 2A, as explained in completed and are submitting. By signing this certification statement, applications that apply to the facility for which this application is submitted.	the Application Overview. Indicate below which parts of Form 2A you have
Indicate which parts of Form 2A you have completed and	l are submitting:
Basic Application Information packet Supp	elemental Application Information packet:
	Part D (Expanded Effluent Testing Data)
	Part E (Toxicity Testing: Biomonitoring Data)
	Part F (Industrial User Discharges and RCRA/CERCLA Wastes)
□ F	Part G (Combined Sewer Systems)
ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIF	ICATION.
I certify under penalty of law that this document and all attachments were pre designed to assure that qualified personnel properly gather and evaluate the manage the system or those persons directly responsible for gathering the in accurate, and complete. I am aware that there are significant penalties for su for knowing violations.	information submitted. Based on my inquiry of the person or persons who
Name and official title LARRY South Town	Manager
Signature ————————————————————————————————————	
Telephone number (2/le 7 728 - 2/28	
Date signed 4-24e-11	
Upon request of the permitting authority, you must submit any other information works or identify appropriate permitting requirements.	on necessary to assure wastewater treatment practices at the treatment

SEND COMPLETED FORMS TO:

Form Approved 1/14/99 OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

	N	(AVERAGE DAILY DISCHARGE					ANALYTICAL			
POLLUTANT	Conc.	DISCH Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	METHOD	ML/MDL
METALS (TOTAL RE	COVERABI	E), CYAN	IIDE, PHE	NOLS, AN	ID HARDI	NESS.					
ANTIMONY	<.010	mg/L							3	EPA200.7	.010
ARSENIC	<.010	mg/L			112.6%				3	EPA200.7	.010
BERYLLIUM	<.001	mg/L	7. 17				-	Fig. 1 at	3	EPA200.7	.001
CADMIUM	<.002	mg/L		1.0				je 37.5 80.1.24	14 G 3	EPA200.7	.002
CHROMIUM	<.005	mg/L			7			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3	EPA200.7	.002
COPPER	.014	mg/L			.012	mg/L			· . 3	EPA200.7	., .005
LEAD	<.006	mg/L							3	EPA200.7	.006
MERCURY	<.0002	mg/L		·					3	EPA245.1	.0002
NICKEL	.008	mg/L			.006	mg/L			3	EPA200.7	.005
SELENIUM	<.01	mg/L							3	EPA200.7	.010
SILVER	<.005	mg/L							3	EPA200.7	.005
THALLIUM	<.02	mg/L							3	EPA200.7	.02
ZINC	.061	mg/L			.049	mg/L			3	EPA200.7	.005
CYANIDE	<.005	mg/L							3	EPA335.2	.005
TOTAL PHENOLIC COMPOUNDS	.07	mg/L	·		.041	mg/L			3	EPA420.1	.005
HARDNESS (AS CaCO3)	174	mg/L			153	mg/L			3	EPA130.2	1
Use this space (or a se	eparate shee	et) to provi	de informa	tion on oti	ner metals	requested	by the per	rmit writer			

Hillsville Wastewater Treatment Plant VA0089443

Outfall number: 001	IV.	1AXIMU	M DAIL'					DISCHA	of the United S RGE	states.)	
POLLUTANT	Conc.	DISCH Units	ARGE Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/MDI
VOLATILE ORGANIC	COMPOUN	NDS					<u> </u>				, , , , . ,
ACROLEIN	<100.0	ug/L							3	EPA624	100.0
ACRYLONITRILE	<100.0	ug/L							3	EPA624	100.0
BENZENE	<4.4	ug/L							3	EPA624	4.4
BROMOFORM	<4.7	ug/L							3	EPA624	4.7
CARBON TETRACHLORIDE	<2.8	ug/L					·		3	EPA624	2.8
COLORBENZENE	<6.0	ug/L							3	EPA624	6.0
CHLOROBIDBROMO- METHANE	<2.2	ug/L							3	EPA624	2.2
CHLOROETHANE	<10.0	ug/L							3	EPA624	10.0
2-CHLORO- ETHYLVINYL ETHER	<10.0	ug/L							3	EPA624	10.0
CHOLOROFORM	<1.6	ug/L		7.00		***** {			3	EPA624	1.6
DICHLOROBROMO- METHANE	<3.1	ug/L			. j		-		3	EPA624	3.1
1,1- DICHLOROETHANE	<4.7	ug/L	**	5 N 8 3		56-40 m +		:	3	EPA624	4.7
TRANS-1,2- DICHLORO- ETHYLENE	<1.6	ug/L		•	-	\$.j.'e			3	EPA624	1.6
1,1- DICHLOROPROPANE	<5	ug/L		:					3	EPA624	5
ETHYLBENZENE	<7.2	ug/L							3	EPA624	7.2
METHYL BROMIDE	<10	ug/L							3	EPA624	10.0
METHYL CHĹORIDE	<2.8	ug/L							3	EPA624	2.8
METHYLENE CHLORIDE	<2.8	ug/L							3	EPA624	2.8
1,1,2,2- TETRACHLORO- ETHANE	<6.9	ug/L							3	EPA624	6.9
TETRACHLORO- ETHYLENE	<4.1	ug/L							3	EPA624	4.1
TOLUENE	<6.0	ug/L							3	EPA624	6.0

Hillsville Wastewater Treatment Plant VA0089443

Outfall number: 001									f the United	States.)	
	٨	MAXIMU DISCH	 3 (0.47) 20 (4.70) 	Y	A۱	/ERAGI	DAILY	DISCHA	RGE	ANALYTICAL	
POLLUTANT	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	METHOD	ML/MDL
1,1,1- TRICHLOROETHANE	<3.8	ug/L							3	EPA624	3.8
1,1,2- TRICHLOROETHANE	<5	ug/L							3	EPA624	5
TRICHLOROETHYL ENE	<1.9	ug/L							3	EPA624	1.9
VINYL CHLORIDE	<10	ug/L							3	EPA624	10
Use this space (or a se	parate she	et) to provi	ide informa	ation on ot	her metals	requested	by the pe	rmit writer			
ACID-EXTRACTABLE	COMPOU	NDS									
P-CHLORO-M- CRESOL	<10	ug/L							3	EPA625	10
2-CHLOROPHENOL	<5	ug/L			,				3	EPA625	10
2,4- DIMETHYLPHENOL	<5	ug/L			- 9,		1, 141		3	EPA625	10
4,6-DINITRO-O- CRESOL	<24	ug/L	++ F+,	!	i i	···	or and	-	3	EPA625	10
2,4- DINITROPHENOL	<42	ug/L	27 v 24 v 25 v	*			4.5		3	EPA625	10
2-NITROPHENOL	< 5	ug/L	1.		* * * }*			·	3	EPA625	10
4-NITROPHENOL	<5	ug/L							3	EPA625	10
PENTA CHLOROPHENOL	<5	ug/L							3	EPA625	20
PHENOL	<5	ug/L							3	EPA625	10
2,4,6-TRICHLORO PHENOL	<5	ug/L							3	EPA625	10
Use this space (or a se	parate shee	et) to provi	de informa	ition on otl	ner metals	requested	by the per	mit writer			
BASE-NEUTRAL CON	POUNDS		•							·	
ACENAPHTHENE	<5	ug/L							3	EPA625	10
ACENAPHTYLENE	<5	ug/L						· .	3	EPA625	10
ANTHRACENE	<5	ug/L							. 3	EPA625	10
BENZIDINE	<4	ug/L							3	EPA625	10
BENZO(A) ANTHRAÇENE	<7.8	ug/L							3	EPA625	10
BENZO(A)PYRENE	<5	ug/L							3	EPA625	10

Hillsville Wastewater Treatment Plant VA0089443

Outfall number: 001									f the United	States.)	de Artonomo armend
		AXIMU DISCH		Y	A\	'ERAGE	: DAILY	DISCHA	RGE	ANIAINTIOAI	
POLLUTANT	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	ANALYTICAL METHOD	ML/MDI
3.4 BENZO- FLUORANTHENE	<5	ug/L							3	EPA625	10
BENZO(GHI)PERYL ENE	<5	ug/L							3	EPA625	10
BENZO(K)FLUORA NTHENE	<5	ug/L							3	EPA625	10
BIS (2-CHLORO ETHOXY) METHANE	<5.3	ug/L							3	EPA625	10
BIS (2-CHLOROETHYL)- ETHER	<5.7	ug/L							3	EPA625	10
BIS (2-CHLOROISO- PROPYL) ETHER	<5.7	ug/L							3	EPA625	10
BIS (2-ETHYLHEXYL) PHTHALATE	<5	ug/L				:			3	EPA625	10
4-BROMOPHENYL PHENYL ETHER	<5	ug/L							3	EPA625	10
BUTYL BENZYL PHTHALATE	<5	ug/L				- 1,7	:		3	EPA625	10
2-CHLORO NAPHTHALENE	<5	ug/L				1 H			3	EPA625	10
4-CHLORPHENYL PHENYL ETHER	<5	ug/L		2		,			3	EPA625	10
CHRYSENE	√ < 5	ug/L			,				3	EPA625	10
DI-N-BUTYL PHTHALATE	<5	ug/L							3	EPA625	10
DI-N-OCTYL PHTHALATE	<5	ug/L							3	EPA625	10
DIBENZO(A,H) ANTHRACENE	<5	ug/L							3	EPA625	10
1,2-DICHLORO BENZENE	<5	ug/L							1	EPA625	10
1,3-DICHLORO BENZENE	<5	ug/L							1	EPA625	10
1,4-DICHLORO BENZENE	<5	ug/L				-			1	EPA625	10
3,3-DICHLORO BENZIDINE	<16.5	ug/L							3	EPA625	10
DIETHYL PHTHALATE	<5	ug/L							3	EPA625	10
DIMETHYL PHTHALATE	<5	ug/L							3	EPA625	10
2,4-DINITROTOLUENE	<5.7	ug/L							3	EPA625	10
2,6-DINİTROTOLUENE	<5	ug/L							3	EPA625	10
1,2- DIPHENYLHYDRAZINE	<10	ug/L							3	EPA625	10

Hillsville Wastewater Treatment Plant VA0089443

Form Approved 1/14/99 OMB Number 2040-0086

Outfall number: 001									f the United	States.)	
	N	MAXIMU DISCH		Y	A۱	/ERAGE	DAILY	DISCHA	RGE	ANALYTICAL	
POLLUTANT	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples	METHOD	ML/MDL
FLUORANTHENE	<5	ug/L							3	EPA625	10
FLUORENE	<5	ug/L							3	EPA625	10
HEXACHLORO BENZENE	<5	ug/L							3	EPA625	10
HEXACHLOROBUT ADIENE	<5	ug/L							3	EPA625	10
HEXACHLOROCYCLO- PENTADIENE	<10	ug/L							3	EPA625	10
HEXA CHLOROETHANE	<5	ug/L							3	EPA625	10
INDENO(1,2,3-CD) PYRENE	<5	ug/L							3	EPA625	10
ISOPHORONE	<5	ug/L							3	EPA625	10
NAPHTHALENE	<5	ug/L							3	EPA625	10
NITROBENZENE	<5	ug/L					2		. 3	EPA625	10
N-NITROSODI-N- PROPYLAMINE	<10	ug/L						. 1. 	3	EPA625	. 10
N-NITROSODI- METHYLAMINE	<10	ug/L	,			-			3	EPA625	10
N-NITROSODI- PHENYLAMINE	<5	ug/L							3	EPA625	1-1-10
PHENANTHRENE	<5.4	ug/L							3	EPA625	10
PYRENE	<5	ug/L							3	EPA625	10
1,2,4- TRICHLOROBENZENE	<5	ug/L							3	EPA625	10
Use this space (or a se	parate shee	et) to provid	de informa	tion on oth	ner metals	requested	by the pe	rmit writer	· T		
Use this space (or a se	parate shee	et) to provid	de informa	tion on oth	ner metals	requested	by the pe	rmit writer			
				and the second deposits to the				9.00 7.00			a for the analysis of the analysis

END OF PART D.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM
2A YOU MUST COMPLETE

Hillsville Wastewater Treatment Plant VA0089443

Form Approved 1/14/99 OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity tests conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E. biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form the contains of the contains and the contains of the contains of the contains.

If no biomonit complete.	toring data is required, do r	not complete Part E. Refe	r to the Applica	ation Overview for	r directions on whic	h other sections of the	form to
E.1. Re	quired Tests.						
Ind	icate the number of whole	effluent toxicity tests cond	ucted in the pa	st four and one-h	alf years.		
\boxtimes	chronic acute						
	lividual Test Data. Con e column per test (where ea						<u>f years</u> . Allow
		*Test number:	**	Test number:		Test number: _	
a.	Test information.	. No. 2		· (*)		, - :	av. 1
Test Species	& test method number					San in	
Age at initiation	on of test	. 24					
Outfall numbe	er						
Dates sample	collected						
Date test star	ted		*****				
Duration							
b.	Give toxicity test me	thods followed.					
Manual title							
Edition number	er and year of publication						
Page number	(s)						
c.	Give the sample col	lection method(s) used. F	or multiple gra	b samples, indica	ite the number of gr	ab samples used.	
24-Hour comp	posite						
Grab							
d.	Indicate where the s	sample was taken in relatio	n to disinfection	on. (Check ail tha	t apply for each.		
Before disinfe	ction						
After disinfect	ion						
After dechloring	nation						

Hillsville Wastewater Treatment Plant VA0089443

	Test number: N/A	Test number:	Test number:
e. Describe the	point in the treatment process at which the s	ample was collected.	
Sample was collected:			
f. For each test	include whether the test was intended to as	sess chronic toxicity, acute toxicity, or	ooth
Chronic toxicity			
Acute toxicity			
g. Provide the ty	pe of test performed.		
Static			
Static-renewal			
Flow-through			
h. Source of dilu	tion water. If laboratory water, specify type;	if receiving water, specify source.	
Laboratory water			,
Receiving water			
i. Type of dilutio	n water. If salt water, specify "natural" or typ	pe of artificial sea salts or brine used.	
Fresh water			
Salt water			
j. Give the perce	entage effluent used for all concentrations in	the test series.	,
		56	
k. Parameters m	easured during the test. (State whether para	ameter meets test method specification	s)
рН			
Salinity			
Temperature			
Ammonia	,		
Dissolved oxygen			
I. Test Results.			
Acute:		·	
Percent survival in 100% effluent	%	%	%
LC ₅₀			
95% C.I.	%	%	%
Control percent survival	%	%	%
Other (describe)			

ACILITY NAME AND PERMIT NUMBE	ER:		•
lillsville Wastewater Treat	ment Plant VA0089443		Form Approved 1. OMB Number 2040
nronic:			
NOEC	%	%	%
IC ₂₅	%	%	%
Control percent survival	%	%	%
Other (describe)			
m. Quality Control/Qual	ity Assurance.		
reference toxicant data available?			
as reference toxicant test within ceptable bounds?		·	
nat date was reference toxicant test n (MM/DD/YYYY)?	1 1	1 1	I I
ner (describe)			
Yes No	If yes, describe:		
	-		
regarding the cause of toxicity, authority and a summary of the	el appe	vide the dates the informat	tion was submitted to the permitting
Date submitted:	(IMM/DD/1111)	•	
Date submitted: 1 Summary of results: (see instru	/ (MM/DD/YYYY) uctions) ed biomonitoring prove an abser		

EPA Form 3510-2A (Rev. 1-99). Replaces EPA forms 7550-6 & 7550-22.

Hillsville Wastewater Treatment Plant VA0089443

Form Approved 1/14/99 OMB Number 2040-0086

SUPF	PLEME	ENTAL APPL	ICATION IN	IFORM/	ATION				
		vorks receiving dis			ES AND RCI		With the second		er remedial wastes must
GENE	RAL II	NFORMATION			a ta ana ga pagasana ay ay a	Mary process			Maria - D. 1985; I americani managaran
F.1.	Pretr	reatment progra	m. Does the tre	atment wo	rks have, or is su	ubject ot, an a	approved pretre	atment program	?
		′es 🛭 No							
F.2.		ber of Significating types of industr					strial Users (0	CIUs). Provide	the number of each of the
	a.	Number of nor	n-categorical SIU	Js. <u>N</u>	N/A		_		
	b.	Number of CIL	Js.				-		
SIGNI	FICAN	IT INDUSTRIAI	L USER INFO	ORMATIC	ON::				
Supply provide	the follo	owing information ormation requeste	for each SIU. ed for each SIU.	If more tha				orks, copy quest	tions F.3 through F.8 and
F.3.		ificant Industrial		a tion. Prov					eatment works. Submit
	Name:		-		· · · · · · · · · · · · · · · · · · ·				
	Mailing	g Address:							
	1	1							
F.4.	Indus	strial Processes	Describe all th	e industrial	processes that a	affect or cont	tribute to the SIL	J's discharge.	28 d a - 28
	N/A								
F.5.	Princip dischar		าd Raw Materia	al(s). Desc	cribe all of the pri	incipal proces	sses and raw m	aterials that affe	ct or contribute to the SIU's
•	Princip	oal product(s):	N/A						·
	Raw m	naterial(s):							
F.6.	Flow								
	a. ·				e average daily v charge is continu			er discharge into	the collection system in
•		N/A	gpd (, \	_ continuous or		-		
	b.	Non-process w system in gallo	astewater flow ranks per day (gpd)	ate. Indicat and wheth	te the average da ner the discharge	aily volume o is continuou	of non-process was or intermittent	/astewater flow o	discharged into the collection
			gpd (_ continuous or				
F.7.	Pretre	eatment Standa	rds. Indicate wh	hether the S	SIU is subject to	the following:	:		
	a.	Local limits		L	Yes No				
	b.	•	etreatment standa	_	Yes No				
	•	ect to categorical pr	retreatment stan	dards, whic	ch category and s	subcategory?	?		
	N/A								

F.8. Problems at the Treatment Works Attributed to Waste Discharge by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years? Yes			EAND PERMIT NUMBER: /astewater Treatme	ent Plant VA0089443			Form Approved 1/14/98 OMB Number 2040-0088
RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE: F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail or dedicated pipe? Yes No (go to F.12)	F.8.					J. Has the SIU caused o	r contributed to any
RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE: F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail or dedicated pipe? Yes No (go to F.12) F.10 Waste transport. Method by which RCRA waste is received (check all that apply): Truck Rail Dedicated Pipe F.11 Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units). EPA Hazardous Waste Number Amount Units Units		☐ Ye	es 🗌 No 💮 If ye	es, describe each episode.			
F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail or dedicated pipe? Yes No (go to F.12)		N/A		1			
dedicated pipe? Yes No (go to F.12) Waste transport. Method by which RCRA waste is received (check all that apply): Truck Rail Dedicated Pipe Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units). EPA Hazardous Waste Number Amount Units CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER: F.12 Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities? Yes (complete F.13 through F.15.) No Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is excepted to originate in the next five years). F.14 Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, known. (Attach additional sheets if necessary.) Waste Treatment. a. Is this waste treated (or will be treated) prior to entering the treatment works?	RCRA	HAZA	RDOUS WASTE REC	EIVED BY TRUCK, RAIL	., OR DEDICATED	PIPELINE:	
F.10 Waste transport. Method by which RCRA waste is received (check all that apply): Truck Rail Dedicated Pipe Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units). EPA Hazardous Waste Number Amount Units CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER: F.12 Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities? Yes (complete F.13 through F.15.) No Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is excepted to originate in the next five years). F.14 Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, known. (Attach additional sheets if necessary.) F.15 Waste Treatment. a. Is this waste treated (or will be treated) prior to entering the treatment works?	F.9.			ent works receive or has it in the	past three years receive	ed RCRA hazardous was	te by truck, rail or
Truck		☐ Ye	s 🛛 No (go to F.12)				
F.11 Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units). EPA Hazardous Waste Number Amount Units CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER: F.12 Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities? Yes (complete F.13 through F.15.) No Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is excepted to originate in the next five years). F.14 Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, known. (Attach additional sheets if necessary.) F.15 Waste Treatment. a. Is this waste treated (or will be treated) prior to entering the treatment works?	F.10	Waste	transport. Method by w	nich RCRA waste is received (c	heck all that apply):	,	
EPA Hazardous Waste Number Amount Units CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER: F.12 Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities? Yes (complete F.13 through F.15.) No Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is excepted to originate in the next five years). F.14 Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, known. (Attach additional sheets if necessary.) F.15 Waste Treatment. a. Is this waste treated (or will be treated) prior to entering the treatment works?		☐ Tru	uck 🔲 ·Rail	Dedicated Pipe			
CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER: F.12 Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities? Yes (complete F.13 through F.15.) No Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is excepted to originate in the next five years). F.14 Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, known. (Attach additional sheets if necessary.) F.15 Waste Treatment. a. Is this waste treated (or will be treated) prior to entering the treatment works?	F.11	Waste	Description. Give EPA	hazardous waste number and a	mount (volume or mass,	specify units).	
## F.12 Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities? Yes (complete F.13 through F.15.) No No		EPA H	azardous Waste Number	<u>Amount</u>		<u>Units</u>	
## F.12 Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities? Yes (complete F.13 through F.15.) No No							
## F.12 Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities? Yes (complete F.13 through F.15.) No No		<u></u>					
## F.12 Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities? Yes (complete F.13 through F.15.) No No							
Yes (complete F.13 through F.15.) Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is excepted to originate in the next five years). F.14 Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, known. (Attach additional sheets if necessary.) F.15 Waste Treatment. a. Is this waste treated (or will be treated) prior to entering the treatment works?						E ACTION	e de la composición del composición de la compos
F.13 Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is excepted to originate in the next five years). F.14 Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, known. (Attach additional sheets if necessary.) F.15 Waste Treatment. a. Is this waste treated (or will be treated) prior to entering the treatment works?	F.12	Reme	diation Waste. Does the			will) receive waste from re	emedial activities?
F.14 Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, known. (Attach additional sheets if necessary.) F.15 Waste Treatment. a. Is this waste treated (or will be treated) prior to entering the treatment works?	300	Ye	s (complete F.13 through F.	15.) 🛛 No	an 是 and 1870 11 11 11 11 11 11 11 11 11 11 11 11 11	of the state of	人名英格雷 医骨髓
known. (Attach additional sheets if necessary.) F.15 Waste Treatment. a. Is this waste treated (or will be treated) prior to entering the treatment works?	F.13			and type of facility at which the		remedial waste originate	es (or is excepted to
known. (Attach additional sheets if necessary.) F.15 Waste Treatment. a. Is this waste treated (or will be treated) prior to entering the treatment works?			•				
known. (Attach additional sheets if necessary.) F.15 Waste Treatment. a. Is this waste treated (or will be treated) prior to entering the treatment works?							
a. Is this waste treated (or will be treated) prior to entering the treatment works?	F.14				are expected to be recei	ved). Include data on vo	olume and concentration, if
	F.15		Treatment.				***************************************
Yes No		a.	Is this waste treated (or v	vill be treated) prior to entering	the treatment works?		
			Yes No				
If yes, describe the treatment (provide information about the removal efficiency):			If yes, describe the treatr	nent (provide information about	the removal efficiency):		
b. Is the discharge (or will the discharge be) continuous or intermittent?		b.	Is the discharge (or will the	ne discharge be) continuous or	ntermittent?		
Continuous Intermittent If intermittent, describe discharge schedule.			Continuous	Intermittent	If intermittent, descri	ibe discharge schedule.	

Hillsville Wastewater Treatment Plant VA0089443

Form Approved 1/14/99 OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART G. COMBINED SEWER SYSTEMS

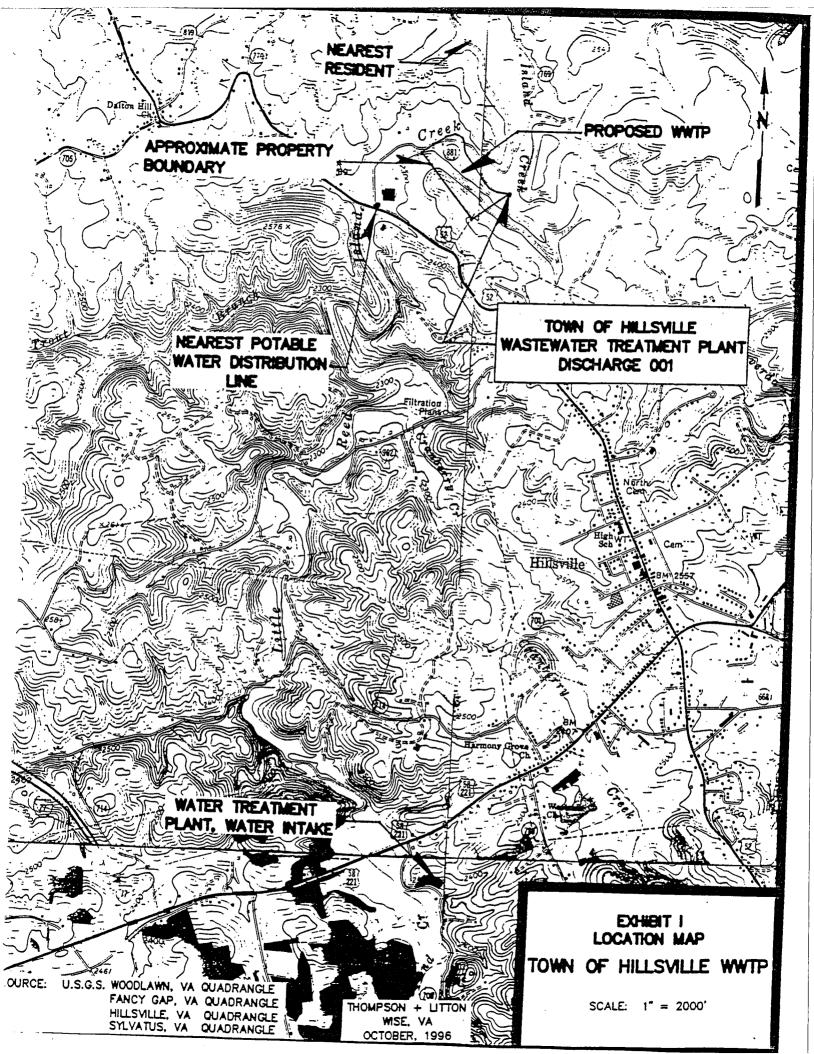
If the treatment works has a combined sewer system, complete Part G.

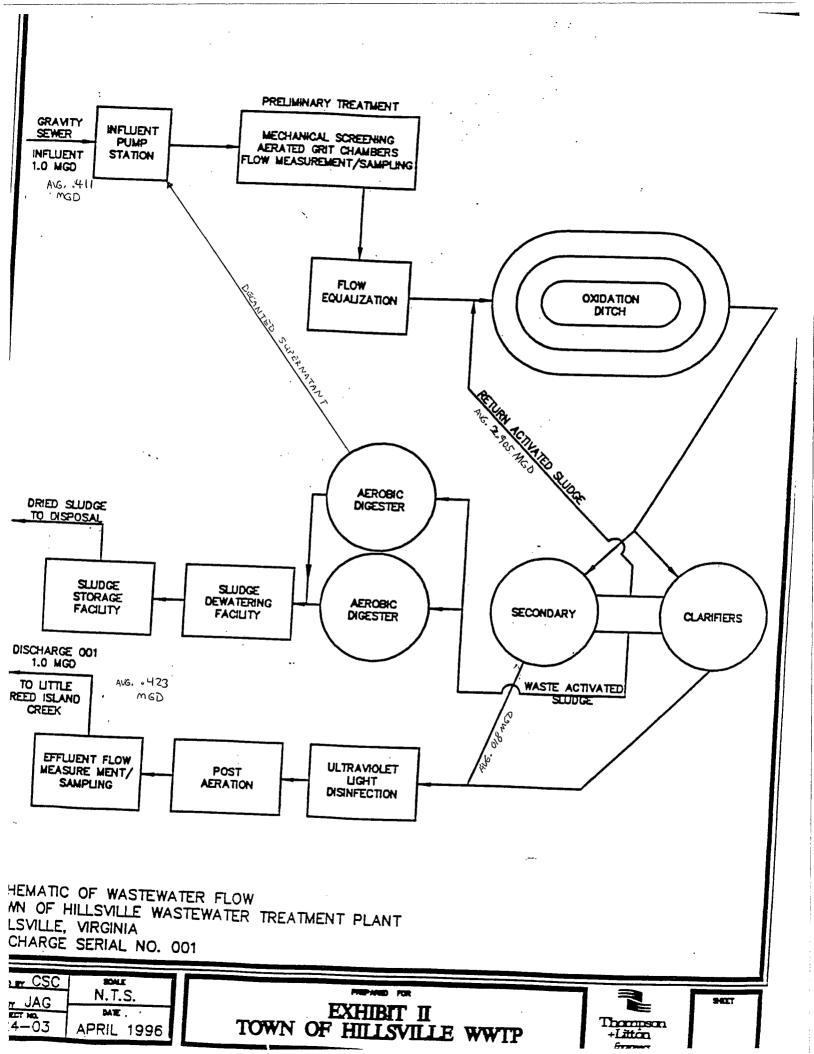
- G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information)
 - a. All CSO discharge points.
 - b. Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters).
 - c. Waters that support threatened and endangered species potentially affected by CSOs.
- **G.2. System Diagram.** Provide a diagram, either in the map provided in G.1 or on a separate drawing, of the combined sewer collection system that includes the following information.
 - a. Location of major sewer trunk lines, both combined and separate sanitary.
 - b. Locations of points where separate sanitary sewers feed into the combined sewer system.
 - c. Locations of in-line and off-line storage structures.
 - d. Locations of flow-regulating devices.
 - e. Locations of pump stations.

CSO	DUTFAL	LS:				
Comple	ete questi	ons G.3 through G.6 once <u>for each</u>	CSO discharge point.			
G.3	Descri	ption of Outfall.				
	a.	Outfall number N/A	v j	<u> </u>		
	b.	Location 中间 中间 中间 经基础	, n V#	the second		t
	nakith	(city or town, i	applicable)	(Zip Code)		
		(County)		(State)		
		(Latitude)		(Longitude)		
	C.	Distance from shore (if applicable)		ft.		
	d.	Depth below surface (if applicable)		ft.		
	e.	Which of the following were monitor	red during the last year	for this CSO?		
		Rainfall	CSO pollutar	nt concentrations	CSO frequency	
		CSO flow volume	Receiving wa	ater quality		
	f.	How many storm events were mon	itored during the last ye	ar?		
G.4.	CSO E	vents.				
	a.	Give the number of CSO events in	the last year.			
		N/A events (actual	or 🔲 approx.)			
	b.	Give the average duration per CSC	event.			
		hours (actual o	or 🔲 approx.)			

FACILI	TY NAM	ME AND PERMIT NUMBER:	
Hills	ville V	Wastewater Treatment Plant VA0089443	Form Approved 1/14/99 OMB Number 2040-0086
	c.	Give the average volume per CSO event.	
		million gallons (actual or approx.)	
	d.	Give the minimum rainfall that caused a CSO event in the last year	
		Inches of rainfall	
G.5.	Desc	scription of Receiving Waters.	
	a.\	Name of receiving water: N/A	
	b.	Name of watershed/river/stream system:	· · · · · · · · · · · · · · · · · · ·
	•	United State Soil Conservation Service 14-digit watershed code (if known):	
	c.	Name of State Management/River Basin:	
		United States Geological Survey 8-digit hydrologic cataloging unit code (if known):	
G.6.	cso	O Operations.	
	perma	cribe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermanent or intermanent or intermanent or intermatent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of ity standard).	
•	N/A		
	<u></u>		AND A STATE OF THE
		END OF PART G.	
REF	ER T	TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER	PARTS OF FORM

Additional information, if provided, will appear on the following pages.





Client: Environmental Management Services, Inc.

Project ID: EMSI0701

Client Sample ID: Hillsville WWTP Outfall 001

Permit No: VA0089443

Sample Period: 7/30/07 to 8/2/07

C B I

Report of Analysis: Whole Effluent Toxicity (WET)

Submitted To:

Mr. Michael Johnson

Environmental Management Services, Inc.

P.O. Box 784

Wytheville, VA 24382

Prepared By:

Coastal Bioanalysts, Inc. 6400 Enterprise Court Gloucester, VA 23061 (804) 694-8285

www.coastalbio.com

Contact: Peter F. De Lisle, Technical Director

Chronic Test l	Results*	· · · · · · · · · · · · · · · · · · ·								
Species- Test Method	Endpoint	NOEC	LOEC	ChrV	PMSD	T.U. _C	IC25	48-h LC50	LC50 95% C.L.	T.U. _{Ac}
C. dubia	Survival	100	>100	>100	N/A	1.00	N/A	>100	N/A	<1.00
EPA 1002.0	Reproduction	100	>100	>100	41	1.00	>100	N/A	N/A	N/A
P. promelas	Survival	100	>100	>100	N/A	1.00	N/A	>100	N/A	<1.00
EPA 1000.0	Biomass	9	18	12.73	37	11.11	4.2	N/A	N/A	N/A

*Note: Replicate-specific, sporadic mortality in effluent treatments, but not controls, high PMSD, and nonmonotonic dose-response suggests the presence of a fish pathogen, as opposed to chemical toxicants, as the cause of fish mortality. Lack of effect in the concurrent chronic *Ceriodaphnia* test supports this conclusion. Details regarding test conduct and data analysis provided in attached bench sheets and printouts as applicable.

Chronic Test Biological Sur	nmary Data			Sample	Concentra	tion (%)	
Species-Method Endpoint		Control	4.5	ġ ¯	18	36	100
C. dubia EPA 1002.0	Survival (%):	100	70	100	100	90	100
	Repro (# young):	17.3	16.5	19.2	17.8	17.5	17.7
P. promelas EPA 1000.0	Survival (%):	95	75	83	50 ·	63	85
*	Biomass (mg):	0.651	0.461	0.490	0.278	0.371	0.512

Test Information Species-Method	Start Date/Time End Date/Time	Organism Source	Hatch/Harvest Date/Time	Acclimation Temp.	Acclimation Water	Test Aerated?
C. dubia EPA 1002.0	7/31/07 1145 8/6/07 1400	CBI Stock	7/30/07 1640 7/30/07 2200	25° C	Mod. Hard Syn. FW	No
P. promelas EPA 1000.0	7/31/07 1205 8/7/07 1110	CBI Stock	7/30/07 1500 7/31/07 0830	25° C	Mod. Hard Syn. FW	No

Sample/Dilution Water Data	Chronic Test						
	Sar	nple	Dilutio	n Water			
Water Quality Parameter (Units)	Mean	Std. Dev.	Mean	Std. Dev.			
Arrival Temperature (°C)	4	0.6	N/A	N/A			
Use Temperature (°C)	25	0.8	25	0			
Conductivity (µS/cm)	869	79	292	6.1			
pH (S.U.)	7.53	0.12	7.69	0.05			
Dissolved Oxygen (mg/l)	8.2	0	8.2	0			
Total Hardness (mg/l as CaCO ₃)	163	4.2	98	2.7			
Alkalinity (mg/l as CaCO ₃)	87	9.3	63	2.4			
Total Residual Chlorine (mg/l)	<q.l.< td=""><td>0</td><td>N/A</td><td>N/A</td></q.l.<>	0	N/A	N/A			
Ammonia (mg/l NH ₃ -N)	<1.0	0	N/A	N/A			

Dilution water = Moderately hard synthetic freshwater made with ASTM Type I deionized water

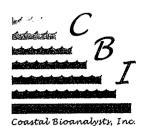
Client: Environmental Management Services, Inc.

Project ID: EMSI0801

Client Sample ID: Hillsville WWTP Outfall 001

Permit No: VA0089443

Sample Period: 8/18/08 to 8/21/08



Report of Analysis: Whole Effluent Toxicity (WET)

Submitted To: Prepared By:

Mr. Mychel Johnson Coastal Bio Environmental Management Services, Inc. 6400 Enterp

P.O. Box 784

Wytheville, VA 24382

Coastal Bioanalysts, Inc. 6400 Enterprise Court Gloucester, VA 23061 (804) 694-8285 www.coastalbio.com

Contact: Peter F. De Lisle, Technical Director

Chronic Test I	Results [*]							· · · · · · · · · · · · · · · · · · ·		
Species- Test Method	Endpoint	NOEC	LOEC	ChrV	PMSD	T.U.c	IC25	48-h LC50	LC50 95% C.L.	T.U.Ac
C. dubia	Survival	100	>100	>100	N/A	1.00	N/A	>100	N/A	<1.00
EPA 1002.0	Reproduction	100	>100	>100	24	1.00	>100	N/A	N/A	N/A
P. promelas	Survival	100	>100	>100	N/A	1.00	N/A	>100	N/A	<1.00
EPA 1000.0	Biomass	100	>100	>100	28	1.00	>100	N/A	N/A	N/A

*Note: Details regarding test conduct and data analysis provided in attached bench sheets and printouts as applicable.

Chronic Test Biological Summary Data				Sample	Concentra	tion (%)	
Species-Method	Endpoint	Control	4.5	9	18	36	100
C. dubia EPA 1002.0	Survival (%):	100	100	100	100	100	100
	Repro (# young):	24.9	24.0	24.2	19.5	23.2	19.0
P. promelas EPA 1000.0	Survival (%):	100	98	100	83	75	88
	Biomass (mg):	0.669	0.619	0.608	0.553	0.528	0.541

Test Information	Start Date/Time	Organism	Hatch/Harvest	Acclimation	Acclimation	Test
Species-Method	End Date/Time	Source	Date/Time	Temp.	Water	Aerated?
C. dubia	8/19/08 1450	CBI	8/18/08 1600		Mod. Hard	
EPA 1002.0	8/25/08 1700	Stock	8/18/08 2200	25° C	Syn. FW	No
P. promelas	8/19/08 1405	CBI	8/18/08 1600		Mod. Hard	
EPA 1000.0	8/26/08 1445	Stock	8/19/08 0830	25° C	Syn. FW	No

Sample/Dilution Water Data	Chronic Test						
	San	mple	Dilutio	n Water*			
Water Quality Parameter (Units)	Mean	Std. Dev.	Mean	Std. Dev.			
Arrival Temperature (°C)	5	1.0	N/A	N/A			
Use Temperature (°C)	25	0.7	25	0			
Conductivity (µS/cm)	954	51	295	3.2			
pH (S.U.)	7.71	0.17	7.78	0.05			
Dissolved Oxygen (mg/l)	8.2	0.1	8.2	0			
Total Hardness (mg/l as CaCO ₃)	190	8.7	95	5.4			
Alkalinity (mg/l as CaCO ₃)	93	6.4	59	2.9			
Total Residual Chlorine (mg/l)	<q.l.< td=""><td>0</td><td>N/A</td><td>N/A</td></q.l.<>	0	N/A	N/A			
Ammonia (mg/l NH ₃ -N)	<1.0	0	N/A	N/A			

*Dilution water = Moderately hard synthetic freshwater made with ASTM Type I deionized water

Page 1 of 3 Report Pages
Total No. Printouts/Bench Sheets Attached: 15

EPA Laboratory ID: VA01116

Client: Environmental Management Services, Inc.

Project ID: EMSI0901

Client Sample ID: Hillsville WWTP Outfall 001

Permit No: VA0089443

Sample Period: 10/26/09 to 10/29/09

Coastal Bioanalysts, Inc.

Report of Analysis: Whole Effluent Toxicity (WET)

Submitted To:
Mr. Michael Johnson
Environmental Management Services, Inc.
P.O. Box 784
Wytheville, VA 24382

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Chronic Test I	Results								7.1.11	
Species- Test Method	Endpoint	NOEC	LOEC	ChrV	PMSD	T.U. _C	IC25	48-h LC50	LC50 95% C.L.	T.U.Ac
C. dubia	Survival	100	>100	>100	N/A	1.00	N/A	>100	N/A	<1.00
EPA 1002.0	Reproduction	100	>100	>100	17	1.00	>100	N/A	N/A	N/A
P. promelas	Survival	100	>100	>100	N/A	1.00	N/A	>100	N/A	<1.00
EPA 1000.0	Biomass	100	>100	>100	19	1.00	>100	N/A	N/A	N/A

Note: Details regarding test conduct and data analysis provided in attached bench sheets and printouts as applicable.

Chronic Test Biological Summary Data				Sample	Concentra	tion (%)	
Species-Method	Endpoint	Control	4.50	9.00	18.0	36.0	100
C. dubia EPA 1002.0	Survival (%):	100	100	100	100	100	100
	Repro (# young):	27.1	26.2	26.8	22.9	28.3	27.6
P. promelas EPA 1000.0	Survival (%):	95	100	98	98	98	100
	Biomass (mg):	0.759	0.735	0.703	0.696	0.717	0.719

Test Information Species-Method	Start Date/Time End Date/Time	Organism Source	Hatch/Harvest Date/Time	Acclimation Temp.	Acclimation Water	Test Aerated?
C. dubia	10/27/09 1515	CBI	10/26/09 1625		Mod. Hard	
EPA 1002.0	11/2/09 1700	Stock	10/26/09 2200	25° C	Syn. FW	No
P. promelas	10/27/09 1600	CBI	10/26/09 1615		Mod. Hard	
EPA 1000.0	11/3/09 1525	Stock	10/27/09 0845	25° C	Syn. FW	No

Sample/Dilution Water Data	Chronic Test					
	Sar	nple	Dilutio	n Water		
Water Quality Parameter (Units)	Mean	Std. Dev.	Mean	Std. Dev.		
Arrival Temperature (°C)	3	0.6	N/A	N/A		
Use Temperature (°C)	25	0.5	25	0		
Conductivity (µS/cm)	1081	56	299	1.8		
pH (S.U.)	7.43	0.13	7.73	0.06		
Dissolved Oxygen (mg/l)	8.1	0.2	8.2	0		
Total Hardness (mg/l as CaCO ₃)	197	22	89	7.8		
Alkalinity (mg/l as CaCO ₃)	86	5.9	58	1.0		
Total Residual Chlorine (mg/l)	<q.l.< td=""><td>0</td><td>N/A</td><td>N/A</td></q.l.<>	0	N/A	N/A		
Ammonia (mg/l NH3-N)	<1.0	0	N/A	N/A		

Dilution water = Moderately hard synthetic freshwater

BIOLOGICAL MONITORING, INC. **Toxicity Test Condition Summary**

Client: Town of Hillsville

Prepared by: Jessica Palazzolo

NPDES Permit #: VA0089443

Experiment ID#: HILL080310-2

Test Organism: Ceriodaphnia dubia

Test Type: Short Term Chronic

Organism Age at Start of Test: < 24h

Sample Tested: Outfall 001

Sample Type: 24 Hour Composite

Sample Collection Dates and Times:

From 08/01/10 @ 0800 to 08/02/10 @ 0800; From 08/03/10 @ 0800 to 08/04/10 @ 0800; From 08/05/10 @ 0800 to 08/06/10 @ 0800.

Sample Collector: Autosampler

Test Solution Renewal Frequency: Daily

Dilution Water Used: MHRW 072910

Test Temperature: 25 ± 1 °C

No. of Replicates per conc.: 10

Feeding prior to test: None

No. of Organisms per Replicate: 1

Feeding Regime: 0.1mL YCT & 0.1mL algae, 1 x Daily

Chamber Size: 30 mL PE

Test Volume: 15 mL

Delivered by: Hand

Photo Period: 16h light/8h dark

Test Duration: 8 Days

Start of Test: Date: 08/03/10

Time: 1440

End of Test: Date: 08/11/10

Time: 1344

Equipment:

pH Meter: Hanna 9025 DO Meter: YSI 58 A SCT Meter: Hanna 991300g

°C Measurement: Calibrated Thermometer

Test Method Reference: U.S. EPA. 2002. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving

Waters to Freshwater Organisms. EPA-821-R-02-013.

BIOLOGICAL MONITORING, INC. **Toxicity Test Condition Summary**

Client: Town of Hillsville

Prepared by: Jessica Palazzolo

NPDES Permit #: VA0089443

Experiment ID#: HILL080310-1

Test Organism: Pimephales promelas

Test Type: Short-term Chronic

Organism Age at Start of Test: <24h

Sample Tested: Outfall 001

Sample Type: 24 Hour Composite

Sample Collection Dates and Times:

From 08/01/10 @ 0800 to 08/02/10 @ 0800; From 08/03/10 @ 0800 to 08/04/10 @ 0800; From 08/05/10 @ 0800 to 08/06/10 @ 0800.

Sample Collector: Autosampler

Test Solution Renewal Frequency: Daily

Dilution Water Used: MHRW 072910

Test Temperature: 25 ± 1°C

No. of Replicates per conc.: 4

Feeding prior to test: None

No. of Organisms per Replicate: 10

Feeding Regime: 0.1 mL live rinsed

artemia, 2x daily

Chamber Size: 500 mL PP

Photo Period: 16h light/8h dark

Start of Test: Date: 08/03/10

End of Test: Date: 08/10/10

Test Volume: 300 ml.

Delivered by: Hand

Test Duration: 7 d

Time: 1514

Time: 1603

Equipment:

pH Meter: Hanna 9025 DO Meter: Y\$1 58 A

SCT Meter: Hanna 991300g

°C Measurement: Calibrated Thermometer

Test Method Reference: U.S. EPA. 2002. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. EPA-821-R-02-013.

FACILITY NAME: Hillsville Wastewater Plant VPDES PERMIT NUMBER: VA0089443 VPDES SEWAGE SLUDGE PERMIT APPLICATION FORM

SCREENING INFORMATION

This application is divided into sections. Sections A pertain to all applicants. The applicability of Sections B, C and

	and on your facility's sewage sludge use or disposal practices. The information provided on this page will help you ine which sections to fill out.
1.	All applicants must complete Section A (General Information).
2.	Will this facility generate sewage sludge? X Yes No
	Will this facility derive a material from sewage sludge?YesX_No
	If you answered Yes to either, complete Section B (Generation Of Sewage Sludge Or Preparation Of A Material Derived From Sewage Sludge).
3.	Will this facility apply sewage sludge to the land?Yes _X_No
	Will sewage sludge from this facility be applied to the land? _Yes _X_No
	If you answered No to both questions above, skip Section C.
	If you answered Yes to either, answer the following threequestions N/A
	 Will the sewage sludge from this facility meet the ceiling concentrations, pollutant concentrations, Class A pathogen reduction requirements and one of the vector attraction reduction requirements 18, as identified in the instructions? Yes _No
	b. Will sewage sludge from this facility be placed in a bag or other container for sale or give-away for application to the land?YesNo
	c. Will sewage sludge from this facility be sent to another facility for treatment or blending?YesNo
	If you answered No to all three, complete Section C (Land Application Of Bulk Sewage Sludge).
	If you answered Yes to a, b or c, skip Section C.
1.	Do you own or operate a surface disposal site?Yes _X_No
	If Yes, complete Section D (Surface Disposal).
-	

All applicants must complete this section.

1.	Facility	Information.
	a.	Facility name:Town of Hillsville Wastewater Treatment Plant
	b.	Contact person: Darrick Mayes
		Title: <u>Utilities Director</u>
		Phone: (276) 728-5533
	c.	Mailing address:
		Street or P.O. Box: P.O. Box 545
		City or Town: Hillsville State: VA Zip: 24343
	d.	Facility location:
		Street or Route #: 450 Cross Creek Road
		County: Carroll
		City or Town: Hillsville State: VA Zip: 24343
	e.	Is this facility a Class I sludge management facility? X Yes No
	f.	Facility design flow rate: mgd
	g.	Total population served: 2849
	h.	Indicate the type of facility:
		x Publicly owned treatment works (POTW)
	,	Privately owned treatment works
		Federally owned treatment works
		Blending or treatment operation
		Surface disposal site
		Other (describe):
2.	Applica	nt Information. If the applicant is different from the above, provide the following: N/A
	a.	Applicant name:
at the ex-	$b_{i_1\dots i_{2N}}$	Mailing address:
		Street or P.O. Box:
		Mailing address: Street or P.O. Box: City or Town: State: Zip:
•	c.	Contact person:
		Title:
		Phone: ()
	d.	Is the applicant the owner or operator (or both) of this facility?
•		owneroperator
	e.	Should correspondence regarding this permit be directed to the facility or the applicant? (Check one)
		facility applicant
3.		nformation.
	a.	Facility's VPDES permit number (if applicable): <u>VA0089443</u>
	b.	List on this form or an attachment, all other federal, state or local permits or construction approvals received
	•	or applied for that regulate this facility's sewage sludge managementpractices N/A
		Permit Number: Type of Permit:
4.		Country. Does any generation, treatment, storage, application to land or disposal of sewage sludge from this
	facility of	occur in Indian Country? Yes X No If yes describe:

	boundaries of the a. Location stored b. Location the apple. Line Drawing.	at shows the following inform ne facility: (See attachment) on of all sewage sludge man treated, or disposed. on of all wells, springs, and plicant within 1/4 mile of the	agement faciliti	es, including locations whe	re sewage sludge is genera
	a. Locati storedb. Locati the appLine Drawing.	on of all sewage sludge man treated, or disposed. on of all wells, springs, and plicant within 1/4 mile of the	other surface wa	ater bodies listed in public i	
	b. Locati the app	treated, or disposed. on of all wells, springs, and plicant within 1/4 mile of the	other surface wa	ater bodies listed in public i	
	b. Locati the app	on of all wells, springs, and plicant within 1/4 mile of the			ecords or otherwiseknown
1				141103.	
	treating sewage	Provide a line drawing and/ ed during the term of the per sludge, the destination(s) of ector attraction reduction. (S	mit including al all liquids and	l proceses used for collecti	
<u>;</u>]]	generation, trea If yes, provide t Name: Mailing address		sponsibility of a	contractor? Yes x No	
	Street or P.O. B		State	7in:	
	City or Town: _ Phone: ()		State.	ZID.	
		leral, State or Local Permit l	Number(s) appli	cable to this facility's sewa	ge sludge:
: t	the pollutants w	ntrations. Using the table be	1		
		hich limits in sewage sludge disposal practices. All data more than four and one half	have been estal must be based o	olished in 9 VAC 2531-10 on three or more samples tal	et seq. for this facility's
		disposal practices. All data	have been estal must be based o	olished in 9 VAC 2531-10 on three or more samples tal	et seq. for this facility's ken at least one month apar
РО	and must be no	disposal practices. All data more than four and one-half CONCENTRATION	have been estal must be based of years old.(SEE	olished in 9 VAC 2531-10 on three or more samples tal ATTACHMENT) ANALYTICAL	et seq. for this facility's ken at least one month aparent DETECTION LEVEL
PO	and must be no	disposal practices. All data more than four and one-half CONCENTRATION (mg/kg dry weight)	have been estal must be based of years old.(SEE	olished in 9 VAC 2531-10 on three or more samples tal ATTACHMENT) ANALYTICAL METHOD	et seq. for this facility's ken at least one month aparent description development by the sequence of the sequ
PO	and must be no DLLUTANT Arsenic	disposal practices. All data more than four and one-half CONCENTRATION (mg/kg dry weight) N/A	have been estal must be based of years old.(SEE	olished in 9 VAC 2531-10 on three or more samples tal ATTACHMENT) ANALYTICAL	et seq. for this facility's ken at least one month aparent DETECTION LEVEL
PO	Arsenic Cadmium	disposal practices. All data more than four and one-half CONCENTRATION (mg/kg dry weight) N/A N/A	have been estal must be based of years old.(SEE	olished in 9 VAC 2531-10 on three or more samples tal ATTACHMENT) ANALYTICAL METHOD	et seq. for this facility's ken at least one month aparent description development by the sequence of the sequ
PO	Arsenic Cadmium Chromium	disposal practices. All data more than four and one-half CONCENTRATION (mg/kg dry weight) N/A N/A 48	have been estal must be based of years old.(SEE	olished in 9 VAC 2531-10 on three or more samples tal ATTACHMENT) ANALYTICAL METHOD	et seq. for this facility's ken at least one month aparent description development by the sequence of the sequ
PO	Arsenic Cadmium Chromium Copper	disposal practices. All data more than four and one half CONCENTRATION (mg/kg dry weight) N/A N/A 48 N/A	have been estal must be based of years old.(SEE SAMPLE DATE 8-31-10	olished in 9 VAC 2531-10 on three or more samples tal ATTACHMENT) ANALYTICAL METHOD	et seq. for this facility's ken at least one month aparent description development by the sequence of the sequ
PO	Arsenic Cadmium Chromium Copper Lead	disposal practices. All data more than four and one-half CONCENTRATION (mg/kg dry weight) N/A N/A N/A N/A N/A N/A N/A	have been estal must be based of years old.(SEE SAMPLE DATE 8-31-10	olished in 9 VAC 2531-10 on three or more samples tal ATTACHMENT) ANALYTICAL METHOD	et seq. for this facility's ken at least one month aparticle and better the desired at least one month aparticle at least one month
PO	Arsenic Cadmium Chromium Copper Lead Mercury	disposal practices. All data more than four and one half CONCENTRATION (mg/kg dry weight) N/A N/A N/A N/A N/A N/A N/A N/	have been estal must be based of years old.(SEE SAMPLE DATE	olished in 9 VAC 2531-10 on three or more samples tal ATTACHMENT) ANALYTICAL METHOD 18thSM3030E/31200	DETECTION LEVEL FOR ANALYSIS 3.9 mg/kg dry solids
PO	Arsenic Cadmium Chromium Copper Lead Mercury Colybdenum	disposal practices. All data more than four and one-half CONCENTRATION (mg/kg dry weight) N/A N/A N/A N/A N/A N/A N/A N/	have been estal must be based of years old.(SEE SAMPLE DATE	olished in 9 VAC 2531-10 on three or more samples tal ATTACHMENT) ANALYTICAL METHOD 18thSM3030E/31200	DETECTION LEVEL FOR ANALYSIS 3.9 mg/kg dry solids

X_Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)

Section D (Surface Disposal)

Section C (Land Application of Bulk Sewage Sludge)

FACILITY NAME: Hillsville WWTP

VPDES PERMIT NUMBER: VA 0089443

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Larry South, Town Manager

Signature Date Signed 84/25/11

Telephone number 176-728-2128

Upon request of the department, you must submit any other information necessary to assess sewage sludge use or disposal practices at your facility or identify appropriate permitting requirements.

FACILITY NAME: Hillsville Wastewater Plant VPDES PERMIT NUMBER: VA0089443

SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

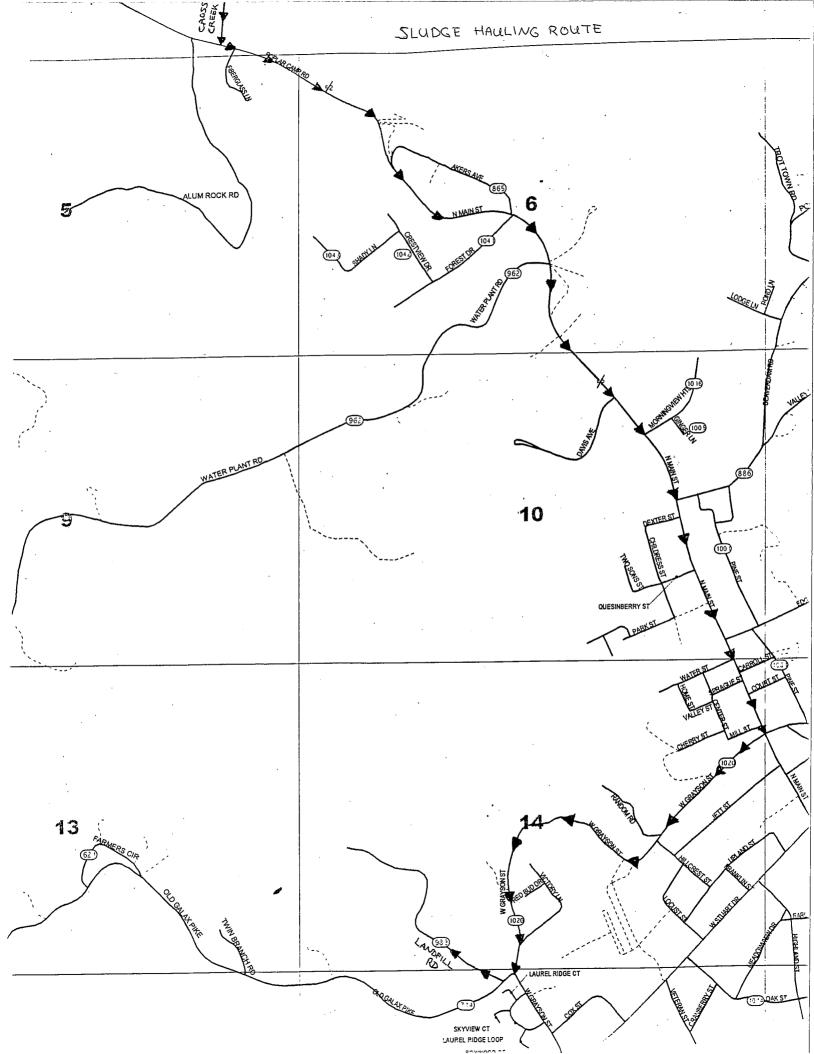
Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1.		ant Generated On Site. dry metric tons per 365-day period generated at your facility: 52.6 dry metric tons
2.	dispo	ant Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or sal, provide the following information for each facility from which sewage sludge is received. If you receive ge sludge from more than one facility, attach additional pages as necessary(n/a) Facility name: Contact Person: Title: Phone ()
	c.	Mailing address: Street or P.O. Box: City or Town: State: Zip:
	d.	Facility Address: (not P.O. Box)
	e. f.	Total dry metric tons per 365-day period received from this facility: dry metric tons Describe, on this form or on another sheet of paper, any treatment processes known to occur at the offsite facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:
}	Treatr	nent Provided at Your Facility.
•	a.	Which class of pathogen reduction is achieved for the sewage sludge at your facility? Class AClass B XNeither or unknown
	b.	Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: N/A
	c.	Which vector attraction reduction option is met for the sewage sludge at your facility? X_ Option 1 (Minimum 38 percent reduction in volatile solids) Option 2 (Anaerobic process, with bench-scale demonstration) Option 3 (Aerobic process, with bench-scale demonstration) Option 4 (Specific oxygen uptake rate for aerobically digested sludge) Option 5 (Aerobic processes plus raised temperature) Option 6 (Raise pH to 12 and retain at 11.5) Option 7 (75 percent solids with no unstabilized solids) Option 8 (90 percent solids with unstabilized solids) None or unknown
	d.	Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge: aerobic process. 38% volatile reduction.
	e.	Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above: N/A
٠.		ration of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements and One stor Attraction Reduction Options 1-8 (EQ Sludge). N/A
	(If sewa	nge sludge from your facility does not meet all of these criteria, skip.Question 4.) Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land
	b.	dry metric tons Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?

FACII	LITY NA	NAME: Hillsville Wastewater Plant VPDES PERI	MIT NUMBER:	VA0089443
	•	YesNo		
5.	Sala o	e or Give-Away in a Bag or Other Container for Application to the Land.		
J.		mplete this question if you place sewage sludge in a bag or other container for sale or give-away pi	rior to land applicati	on. Skin this
		stion if sewage sludge is covered in Question 4.) N/A	Tor to mild apprecia	om omp mo
	a.	Total dry metric tons per 365-day period of sewage sludge placed in a bag or o	ther container at	your facility
	u.	for sale or give-away for application to the land: dry metric tons		,
	b.	Attach, with this application, a copy of all labels or notices that accompany the	sewage sludge b	eing sold or
	0.	given away in a bag or other container for application to the land.	· somage staage c	omig som or
6.	Shinm	pment Off Site for Treatment or Blending. N/A		
0.		mplete this question if sewage sludge from your facility is sent to another facility that provides trea	atment or blending.	This question
		not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this qu		
		red in Questions 4 or 5. If you send sewage sludge to more than one facility, attach additional she		
	a.	Receiving facility name:		
	b.	Facility contact:		
	••	Title:		
		Phone: ()		
	c.	Mailing address:	•	1
	٠.	Street or P.O. Box:		
		City or Town: State: Zip:		
	d.	Total dry metric tons per 365-day period of sewage sludge provided to receivin	g facility:	dry
	u.	metric tons	g 1401110j	 ()
	Δ.	List, on this form or an attachment, the receiving facility's VPDES permit num	her as well as the	numbers of
	e.	all other federal, state or local permits that regulate the receiving facility's sewa		
				nsposar
		Principles: Type of Demait:		
		Permit Number: Type of Permit:		
of ex.		Permit Number: Type of Permit:		•
	C	and a <u>la company de la compan</u>		om 1/011#
新 語等	f.	Does the receiving facility provide additional treatment to reduce pathogens in facility?YesNo	sewage studge in	om your
*		Which class of pathogen reduction is achieved for the sewage sludge at the rece	eiving facility?	
		Class AClass BNeither or unknown	, , ,	
		Describe, on this form or another sheet of paper, any treatment processes used a	at the receiving fa	cility to
	•	reduce pathogens in sewage sludge:	S	,
	g.	Does the receiving facility provide additional treatment to reduce vector attract	ion characteristics	s of the
	5,	sewage sludge?YesNo		
		Which vector attraction reduction option is met for the sewage sludge at the rec	eiving facility?	
	,	Option 1 (Minimum 38 percent reduction in volatile solids)		
		Option 2 (Anaerobic process, with bench-scale demonstration)		
		Option 3 (Aerobic process, with bench-scale demonstration)		
		Option 4 (Specific oxygen uptake rate for aerobically digested sludge)		
		Option 5 (Aerobic processes plus raised temperature)		
		Option 6 (Raise pH to 12 and retain at 11.5)		
		Option 7 (75 percent solids with no unstabilized solids)		
		Option 8 (90 percent solids with unstabilized solids)		
		None unknown	-	
		Describe, on this form or another sheet of paper, any treatment processes used a	at the receiving fa	cility to
		reduce vector attraction properties of sewage sludge:	it the receiving ta	cinty to
	h.	Does the receiving facility provide any additional treatment orblending not ider	ntified in for a ah	ove?
	11.	YesNo	101100 HI 1 01 5 a0	
		If yes, describe, on this form or another sheet of paper, the treatment processes	not identified in f	or a shove
		if yes, describe, on this form of another sheet of paper, the treatment processes	not identified iii l	oi g above.
	i.	If you answered yes to f., g or h above, attach a copy of any information you pr	ovide to the recei	ving facility
	**	, min , , ,		J

FACIL	ATY NA	AME: Hillsville Wastewater Plant VPDES PERMIT NUMBER: VA0089443
		to comply with the "notice and necessary information" requirement of 9 VAC 2531-530.G.
	j	Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give
		away for application to the land?YesNo
	1.	If yes, provide a copy of all labels or notices that accompany the product being sold or given away.
	k.	Will the sewage sludge be transported to the receiving facility in a truck-mounted watertight tank normally
		used for such purposes? Yes No. If no, provide description and specification on the vehicle used to
		transport the sewage sludge to the receiving facility.
		Show the haul route(s) on a location map or briefly describe the haul route below and indicate the days of the
		week and the times of the day sewage sludge will be transported.
7.	Land A	application of Bulk Sewage Sludge. N/A
		ete Question 7.a if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in Questions 4, 5 or
		lete Question 7.b, c & d only if you are responsible for land application of sewage sludge.)
	a.	Total dry metric tons per 365-day period of sewage sludge applied to all land application sites:dry
		metric tons
	b.	Do you identify all land application sites in Section C of this application?YesNo
		If no, submit a copy of the Land Application Plan (LAP) with this application (LAP should be prepared in
		accordance with the instructions).
	c.	Are any land application sites located in States other than Virginia?YesNo
		If yes, describe, on this form or on another sheet of paper, how you notify the permitting authority for the
		States where the land application sites are located. Provide a copy of the notification.
	d.	Attach a copy of any information you provide to the owner or lease holder of the land application sites to
to the contract		comply with the "notice and necessary" information requirement of 9 VAC 25-31-530 F and/or H (Examples
		may be obtained in Appendix IV).
y 41% TO	· Alleria	en filosofia filosofia filosofia de la filosofia
8.	Surface	Disposal. N/A
) · · · · ·	(Comple	ete Question 8 if sewage sludge from your facility is placed on a surface disposal site.)
	a.	Total dry metric tons per 365-day period of sewage sludge from your facility placed on all surface disposal
		sites: dry metric tons
	b.	Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?
		YesNo
		If no, answer questions c - g for each surface disposal site that you do not own or operate. If you send sewage
		sludge to more than one surface disposal site, attach additional pages as necessary.
	c.	Site name or number:
	d.	Contact person:
		Title:
		Phone: ()
		Contact is:Site OwnerSite operator
	e.	Mailing address.
		Street or P.O. Box:
		City or Town: State: Zip:
	f.	Total dry metric tons per 365-day period of sewage sludge from your facility placed on this surfacedisposal
		site: dry metric tons
	g.	List, on this form or an attachment, the surface disposal site VPDES permit number as well as the numbers of
		all other federal, state or local permits that regulate the sewage sludge use or disposal practices at the surface
		disposal site:
		Permit Number: Type of Permit:
9.	Incinera	ation. N/A
	(Comple	te Question 9 if sewage sludge from your facility is fired in a sewage sludge incinerator.)

FACL	LITY NA	ME: <u>Hillsville Wastewater Plant</u> VPDES PERMIT NUMBER: <u>VA008944</u>	<u>13</u>
	a.	Total dry metric tons per 365-day period of sewage sludge from your facility fired in a sewagesludge incinerator: dry metric tons	
	b.	Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired? YesNo	
		If no, answer questions c-g for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one sewage sludge incinerator, attach additional pages as necessary.	
	c.	Incinerator name or number:	
	d.	Contact person:	
		Title:	
		Phone: ()	
		Contact is:Incinerator OwnerIncinerator Operator	
	e.	Mailing address.	
		Street or P.O. Box:	
		City or Town: State: Zip:	`
	f.	Total dry metric tons per 365-day period of sewage sludge from your facility fired in this sewage sludge	
		incinerator: dry metric tons	
	g.	List on this form or an attachment the numbers of all other federal, state or local permits that regulate the	
		firing of sewage sludge at this incinerator:	
		<u>Permit Number:</u> <u>Type of Permit:</u>	
10	Diamara	in a Manicipal Calid Wests I and fill	
10.	-	in a Municipal Solid Waste Landfill.	
	for each	e Question 10 if sewage sludge from your facility is placed on a municipal solid waste landfill. Provide the following information nunicipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one)XI
		solid waste landfill, attach additional pages as necessary.)	
	a.	Landfill name: Carroll-Grayson-Galax Solid Waste Authority	
	(b.)()	Contact person: C.M. Mitchell	
		Title: <u>Chairman</u> Phone: (276) 728-4907	
	\$ 14 K K K	Phone: (276) 728-4907 Contact is: x Landfill OwnerLandfill Operator	
	_		
	c.	Mailing address. Street or P.O. Box:	
		City or Town: Hillsville State: VA Zip: 24343	
	d.	Landfill location.	
	u.	Street or Route #: 162 Landfill Road	
	,	County: Carroll	
		City or Town: Hillsville State: VA Zip: 24343	
	•	Total dry metric tons per 365-day period of sewage sludge placed in this municipal solid waste landfill:	
	e.	52.6 dry metric tons	
	f.	List, on this form or an attachment, the numbers of all federal, state or local permits that regulate the	
	1.	operation of this municipal solid waste landfill:	
		Permit Number: Type of Permit:	
		Landfill Operation Permit	
	g.	Does sewage sludge meet applicable requirements in the Virginia Solid Waste Management Regulation, 9	
	8.	VAC 20-80-10 et seq., concerning the quality of materials disposed in a municipal solid waste landfill?	
		x Yes No	
	h.	Does the municipal solid waste landfill comply with all applicable criteria set forth in the Virginia Solid	
	***	Waste Management Regulation, 9 VAC 20-80-10 et seq.? x Yes No	
	i.	Will the vehicle bed or other container used to transport sewage sludge to the municipal solidwaste landfill	
		be watertight and covered? _x_ Yes No	
		Show the haul route(s) on a location map or briefly describe the route below and indicate the days of the wee	k
		and time of the day sewage sludge will be transported. (SEE ATTACHMENT) Monday-Friday 9am-11am;	-
		1pm-3pm	
		•	



Carroll/Grayson/Galax Solid Waste Authority P.O. Box 1837 Hillsville, VA 24343

Phone: (276) 728-4907

Fax: (276) 728-7453

January 13, 2011

Mr Larry South Town Manager Town of Hillsville Hillsville, VA 24343

Dear Mr. South:

The Carroll-Grayson-Galax Solid Waste Authority will continue to accept sludge from the Town of Hillsville's Waste Water Treatment Plant.

Sincerely,

Kenneth E. Reece Landfill Manager

Environmental Management Services

Laboratory Services - Plant Operations - Consultants P.O. Box 784 Wytheville, VA 24382 Phone (276) 228-6464 Fax (276) 228-2325 E-mail: emslab@wiredog.com

Sample No.: 07-1581 **Report Date: 08-27-07**

CHAIN OF CUSTODY INFORMATION

Client: Town of Hillsville

Attention: Todd Jennings

Sample Source: WWTP Description: Sludge

Date/Time Collected: 08-01-07/0935 Collected By: Todd Jennings

Delivered To Laboratory By: Neal Roberts Received By: Gary M. Johnson

Date/Time Received At Laboratory: 08-02-07/0940 Preservation: Cold (3.0°C)

Parameter	Result	Method	Date/Time Analysis Started	Analyst
pH, units	5.7	EPA 150.1	08-02-07/1615	G.M. Johnson
% Solids	11.9	EPA 160.3	08-02-07/1620	G.M. Johnson
% Water	88.1	EPA 160.3	08-02-07/1620	G.M. Johnson
% Organic	62.4	EPA 160.4	08-02-07/1620	G.M. Johnson
Total Coliform, MPN /				
100 g Dry Solids	1.34 X 10 ⁷	18th SM 9221B/C	08-02-07/1500	G.M. Johnson
Fecal Coliform, MPN /				
100 g Dry Solids	4.2 X 10 ⁵	18th SM 9221B/C/E1	08-02-07/1500	G.M. Johnson
The following results are i	eported in m	g/Kg on a dry weight bas	sis.	
Alkalinity	4,000	EPA 310.1	08-27-07/1215	G.L. Johnson
Chloride	1,712	EPA 325.3	08-27-07/1200	G.L. Johnson
TKN	36,200	18th SM 4500-NorgC	08-27-07/1155	G.L. Johnson
Phosphorus.	30,583	18th SM 4500P E	08-14-07/1600	SC*
Nitrate	356.5	18th SM 4500 NO ₃ E	08-13-07/1700	SC*
Nitrite	<2.0	18th SM 4500 NO ₂ B	08-13-07/1200	SC*
Potassium	2,402	18th SM 3030E/3120B	08-10-07/1400	SC*
Calcium	26,928	18th SM 3030E/3120B	08-10-07/1400	SC*
Magnesium	2,909	18th SM 3030E/3120B	08-10-07/1400	SC*
Manganese	1,571	18th SM 3030E/3120B	08-10-07/1400	SC*
Chromium	40.7	18th SM 3030E/3120B	08-10-07/1400	SC*
Molybdenum	<16.0	18th SM 3030E/3120B	08-10-07/1400	SC*
-		Page 1 of 2		
DECLARED NO 00011	n	DOLSTARID NO 00102	LIS EPA LAR CODE L	VAN1164

Environmental Management Services

Laboratory Services - Plant Operations - Consultants P.O. Box 784 Wytheville, VA 24382 Phone (276) 228-6464 Fax (276) 228-2325 E-mail: emslab@wiredog.com

Sample No.: 07-1581

Report Date: 08-27-07

Parameter Chlorinated Hydrocarbons	Result	M ethod	Date/Time Analysis Started	Analyst
2-Chloronaphthalene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene	<2.74 <2.74 <2.74 <2.74 <2.74 <2.74 <2.74 <2.74 <2.74	SW846 8270C SW846 8270C SW846 8270C SW846 8270C SW846 8270C SW846 8270C SW846 8270C SW846 8270C SW846 8270C	08-13-07/1400 08-13-07/1400 08-13-07/1400 08-13-07/1400 08-13-07/1400 08-13-07/1400 08-13-07/1400 08-13-07/1400	SC* SC* SC* SC* SC* SC* SC* SC*

Analysis Subcontracted

Gary M. Jehnson

Page 2 of 2

DECIARID NO 000110

Environmental Management Services

Laboratory Services - Plant Operations - Consultants P.O. Box 784 Wytheville, VA 24382 Phone (276) 228-6464 Fax (276) 228-2325 E-mail: emslab@wiredog.com

Sample No.: 08-2012 **Report Date:** 08-26-08

CHAIN OF CUSTODY INFORMATION

Client: Town of Hillsville

Attention: Todd Jennings

Sample Source: WWTP Description: Sludge

Date/Time Collected: 08-12-08/1300 Collected By: Gary L. Johnson

Delivered To Laboratory By: Gary L. Johnson Received By: Gary L. Johnson

Date/Time Received At Laboratory: 08-12-08/1400 Preservation: Cold (3.9°C)

Parameter	Result	Method	Date/Time Analysis Started	Analyst
			•	<u>-</u>
pH, units	6.8	18th SM 4500-H ⁺ B	08-12-08/1530	G.L. Johnson
% Solids	12.6	EPA 160.3	08-12-08/1645	G.M. Johnson
% Water	87.4	EPA 160.3	08-12-08/1645	G.M. Johnson
% Organic	55.7	EPA 160.4	08-12-08/1645	G.M. Johnson
Total Coliform, MPN /	7			
100 g Dry Solids	1.27 X 10 ⁷	18th SM 9221B/C	08-12-08/1625	G.M. Johnson
Fecal Coliform, MPN /	_			
100 g Dry Solids	1.35 X 10 ⁶	18th SM 9221B/C/E1	08-12-08/1625	G.M. Johnson
The following results are re	eported in m	g/Kg on a dry weight bas	is.	
Alkalinity	30,700	EPA 310.1	08-12-08/1530	G.L. Johnson
Chloride	1,900	EPA 325.3	08-12-08/1540	G.L. Johnson
TKN	41,000	18th SM 4500-N _{org} C	08-12-08/1520	G.L. Johnson
Total Phosphorus	22,242	18th SM 4500P E	08-21-08	SC*
Nitrate	112.8	18th SM 4500 NO ₃ ⁻ E	08-22-08	SC*
Nitrite	<0.8	18th SM 4500 NO ₂ B	08-22-08	SC*
Calcium	31,840	SW-846 3050/6010B	08-18-08	SC*
Chromium	38	SW-846 3050/6010B	08-18-08	SC*
Magnesium	3,960	SW-846 3050/6010B	08-18-08	SC*
Manganese	1,400	SW-846 3050/6010B	08-18-08	SC*
Molybdenum	<16	SW-846 3050/6010B	08-18-08	SC*
Potassium	3,208	SW-846 3050/6010B	08-18-08	SC*
		Page 1 of 2		
DEQ LAB I.D. NO. 000110)	DCLS LAB I.D. NO. 00102	US EPA LAB CODE I.I	D. VA01164

EMS, Inc. Environmental Management Services

Laboratory Services - Plant Operations - Consultants P.O. Box 784 Wytheville, VA 24382 Phone (276) 228-6464 Fax (276) 228-2325 E-mail: emslab@wiredog.com

Sample No.: 08-2012

Report Date: 08-26-08

Parameter	Result	Method	Date/Time Analysis Started	Analyst			
Chlorinated Hydrocarbons							
2-Chloronaphthalene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Hexachlorobenzene Hexachlorobutadiene Hexachlorocyclopentadiene Hexachloroethane 1,2,4-Trichlorobenzene	<21.92 <21.92 <21.92 <21.92 <21.92 <21.92 <21.92 <21.92 <21.92	SW-846 8270C SW-846 8270C SW-846 8270C SW-846 8270C SW-846 8270C SW-846 8270C SW-846 8270C SW-846 8270C SW-846 8270C	08-25-08 08-25-08 08-25-08 08-25-08 08-25-08 08-25-08 08-25-08 08-25-08	SC* SC* SC* SC* SC* SC* SC* SC*			

^{*}Analysis Subcontracted

By: Will Will Milliam ——
Gary M. Johnson

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Environmental Management Services

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Sample No.: 09-3272 Report Date: 11-16-09

CHAIN OF CUSTODY INFORMATION

Client: Town of Hillsville

Attention: Todd Jennings

Sample Source: WWTP Description: Sludge

Date/Time Collected: 10-16-09/1330 Collected By: Todd Jennings

Delivered To Laboratory By: Gary L. Johnson Received By: Gary L. Johnson

Date/Time Received At Laboratory: 10-19-09/1700 Preservation: Cold (3.6°C)

Parameter	Result	Method	Date/Time Analysis Started	Analyst
pH, units	7.1	18th SM 4500-H ⁺ B	11-09-09/1600	G.L. Johnson
% Solids	10.7	EPA 160.3	10-26-09/1315	G.M. Johnson
% Water	89.3	EPA 160.3	10-26-09/1315	G.M. Johnson
% Organic	56.5	EPA 160.4	10-26-09/1315	G.M. Johnson
Total Coliform, MPN /				
100 g Dry Solids	1.5 X10 ⁶	18th SM 9221B/C	10-26-09/1300	G.M. Johnson
Fecal Coliform, MPN /				
100 g Dry Solids	4.67 X 10 ⁵	18th SM 9221B/C/E1	10-26-09/1300	G.M. Johnson
The following results are r	eported in m	g/Kg on a dry weight ba	sis.	
Alkalinity	22,000	EPA 310.1	11-09-09/1600	G.L. Johnson
Chloride	1,300	EPA 325.3	11-09-09/1620	G.L. Johnson
TKN	43,900	18th SM 4500-N _{org} C	11-09-09/1550	G.L. Johnson
Total Phosphorus	236,445	18th SM 4500 P E	10-28-09	SC*
Nitrate	1,056.5	18th SM 4500 NO ₃ ⁻ E	10-28-09	SC*
Nitrite	0.463	18th SM 4500 NO ₂ ⁻ B	10-28-09	SC*
Calcium	27,037	SW-846 3050/6010B	10-28-09	SC*
Chromium	78	SW-846 3050/6010B	10-28-09	SC*
Magnesium	2,963	SW-846 3050/6010B	10-28-09	SC*
Manganese	2,583	SW-846 3050/6010B	10 - 28-09	SC*
Molybdenum	<463	SW-846 3050/6010B	10-28-09	SC*
Potassium	3,065	SW-846 3050/6010B	10-28-09	SC*
		Page 1 of 2		
DEQ LAB I.D. NO. 000110		DCLS LAB I.D. NO. 00102	US FPA LAR CODF	ID VA01164

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Sample No.: 09-3272

Report Date: 11-16-09

Parameter	Result	Method	Date/Time Analysis Started	Analyst
Chlorinated Hydrocarbons				
2-Chloronaphthalene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Hexachlorobenzene Hexachlorobutadiene Hexachlorocyclopentadiene Hexachloroethane 1,2,4-Trichlorobenzene	<3.06 <3.06 <3.06 <3.06 <3.06 <3.06 <3.06 <3.06 <3.06 <3.06	EPA 612 EPA 612 EPA 612 EPA 612 EPA 612 EPA 612 EPA 612 EPA 612	10-30-09 10-30-09 10-30-09 10-30-09 10-30-09 10-30-09 10-30-09	SC* SC* SC* SC* SC* SC* SC* SC*

^{*}Analysis Subcontracted

By: All All Manner Gary M. Johnson

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Sample No.: 10-3413

Report Date: 09-27-10

CHAIN OF CUSTODY INFORMATION

Client: Town of Hillsville

Attention: Todd Jennings

Sample Source: WWTP Description: Sludge

Date/Time Collected: 08-31-10/0827 Collected By: Todd Jennings

Delivered To Laboratory By: Sara K. Glass Received By: Sara K. Glass

Date/Time Received At Laboratory: 08-31-10/1140 Preservation: On Ice

			Date/Time			
Parameter	Result	Method	Analysis Started	Analyst		
pH, units	6.9	18th SM 4500-H ⁺ B	09-02-10/1745	G.L. Johnson		
% Solids	10.5	18th SM 2540G	08-31-10/1835	G.M. Johnson		
% Water	89.5	18th SM 2540G	08-31-10/1835	G.M. Johnson		
% Organic	52.3	18th SM 2540G	08-31-10/1835	G.M. Johnson		
Total Coliform, MPN /						
100 g Dry Solids	1.52 X10 ⁷	18th SM 9221B/C	08-31-10/1720	G.M. Johnson		
Fecal Coliform, MPN /						
100 g Dry Solids	1.24 X 10 ⁶	18th SM 9221B/C/E1	08-31-10/1720	G.M. Johnson		
The following results are reported in mg/Kg on a dry weight basis.						
Alkalinity	13,800	EPA 310.1	09-02-10/1745	G.L. Johnson		
Chloride	1,980	EPA 325.3	09-02-10/1730	G.L. Johnson		
TKN	31,000	18th SM 4500-N _{org} C	09-02-10/1025	G.L. Johnson		
Total Phosphorus	251,470	18th SM 4500 P E	09-08-10	SC*		
Nitrate	140	18th SM 4500 NO ₃ E	09-07-10	SC*		
Nitrite	<95	18th SM 4500 NO ₂ B	09-07-10	SC*		
Calcium	25,810	SW-846 3050/6010B	09-13-10	SC*		
Chromium	48	SW-846 3050/6010B	09-13-10	SC*		
Magnesium	3,867	SW-846 3050/6010B	09-13-10	SC*		
Manganese	1,552	SW-846 3050/6010B	09-13-10	SC*		
Molybdenum	38	SW-846 3050/6010B	09-13-10	SC*		
Potassium	2,780	SW-846 3050/6010B	09-13-10	SC*		
Page 1 of 2						

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Sample No.: 10-3413

Report Date: 09-27-10

Parameter	Result	Method	Date/Time Analysis Started	Analyst
Chlorinated Hydrocarbons				
2-Chloronaphthalene Hexachlorobenzene Hexachlorobutadiene Hexachlorocyclopentadiene Hexachloroethane 1,2,4-Trichlorobenzene	<3.06 <3.06 <3.06 <3.06 <3.06 <3.06	EPA 612 EPA 612 EPA 612 EPA 612 EPA 612 EPA 612	09-09-10 09-09-10 09-09-10 09-09-10 09-09-10	SC* SC* SC* SC* SC* SC*

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^{*}Analysis Subcontracted